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## SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: HANLEY, Susan Examiner #: 11100 Date: 11-1-95  
 Art Unit: 11100 Phone Number 30: 305-4053 Serial Number: 35254  
 Mail Box and Bldg/Room Location: Room NO Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*  
 Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Method of determining the relative humidity of a material

Inventors (please provide full names): HANLEY, Susan

Earliest Priority Filing Date: 11-1-95

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Susan,

Please search patent abstracts of Claim 5 (elected species) and also use in concrete tropical ecosystems.

Thanks

Marine Lamm

P.S. I need abstract by 11/7 if possible.

Point of Contact:  
 Susan Hanley  
 Technical Info. Specialist  
 CM1 12C14 Tel: 305-4053

## STAFF USE ONLY

Searcher: Hanley  
 Searcher Phone #: \_\_\_\_\_  
 Searcher Location: \_\_\_\_\_  
 Date Searcher Picked Up: 10/18  
 Date Completed: 10/24  
 Searcher Prep & Review Time: 90  
 Clerical Prep Time: \_\_\_\_\_  
 Online Time: 85

## Type of Search

NA Sequence (#) \_\_\_\_\_  
 AA Sequence (#) \_\_\_\_\_  
 Structure (#) \_\_\_\_\_  
 Bibliographic \_\_\_\_\_  
 Litigation \_\_\_\_\_  
 Fulltext \_\_\_\_\_  
 Patent Family \_\_\_\_\_  
 Other \_\_\_\_\_

## Vendors and cost where applicable

STN 552  
 Dialog \_\_\_\_\_  
 Questel/Orbit \_\_\_\_\_  
 Dr.Link \_\_\_\_\_  
 Lexis/Nexis \_\_\_\_\_  
 Sequence Systems \_\_\_\_\_  
 WWW/Internet \_\_\_\_\_  
 Other (specify) \_\_\_\_\_

=&gt; d his

(FILE 'HOME' ENTERED AT 11:35:13 ON 24 OCT 2001)

FILE 'REGISTRY' ENTERED AT 11:35:32 ON 24 OCT 2001

L1 228117 S 46.150.18/RID AND SI/ELS AND O/ELS  
 L2 77018 S L1 AND (SI AND O AND C AND H)/ELS AND 4/ELC.SUB  
 L3 7631 S L2 AND PMS/CI  
 L4 0 S L3 AND "BENZENECARBOXYLIC"  
 L5 363 S L3 AND "BENZOIC"  
 L6 121 S L5 AND NR<3  
 L7 STR  
 L8 8 S L7 SSS SAM SUB=L3  
 L9 32 S L7  
 L10 SCREEN 1838 AND 2005 AND 117  
 L11 SCREEN 1840 OR 1992  
 L12 685981 S 46.150.18/RID AND NR<3 AND NRS<3 NOT (P OR M OR S OR N)/ELS  
 L13 50 S L7 AND L10 NOT L11 SSS SAM SUB=L12  
 L14 13375 S L7 AND L10 NOT L11 SSS FUL SUB=L12  
 L15 4637 S L14 AND PMS/CI  
 L16 187 S L14 AND SI/ELS  
 L17 57 S L15 AND L16  
 L18 STR L7  
 L19 4 S L18  
 L20 50 S L18 SSS SAM SUB=L14  
 L21 ~~1271 S L18 SSS FUL SUB=L14~~ • subset search  
 L22 86 S L21 AND SI/ELS  
 L23 51 S L22 AND O>2  
 L24 7 S L23 AND NC>1  
 L25 ~~44 S L23 NOT L24~~  
 L26 10 S L25 AND SI=3  
 L27 2 S L26 AND " POLY[OXY(DIMETHYLSILYLENE)] "  
 L28 1 S L27 AND NR=2  
 L29 9 S L26 NOT L28  
 L30 5 S L24 AND NC=2  
 L31 34 S L25 NOT L27-30

FILE 'HCAPLUS' ENTERED AT 12:39:42 ON 24 OCT 2001

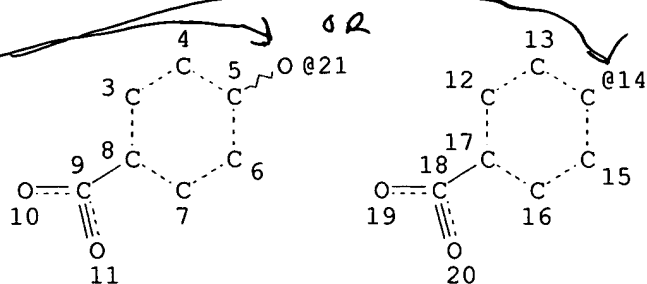
L32 4 S L28, 4 cites > pretty good STR's but not  
 L33 5 S L30, 5 cites related to cosmetics  
 L34 0 S L32 AND (COSMETIC OR TOPICAL) per se  
 L35 0 S L33 AND (COSMETIC OR TOPICAL)  
 L36 25 S L31  
 L37 1 S L36 AND (COSMETIC OR TOPICAL) 1 cite  
 L38 24 S L36 NOT L37, 24 cites - remaining 50,50 cpds.  
 L39 0 S L32-33 AND (GEL OR GELLING)  
 L40 0 S L36 AND (GEL OR GELLING)

=> d que 132  
L7

STR

parent STR

Ak~G1  
1 2



VAR G1=21/14

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 10

CONNECT IS E1 RC AT 11

CONNECT IS E1 RC AT 19

CONNECT IS E1 RC AT 20

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 21

STEREO ATTRIBUTES: NONE

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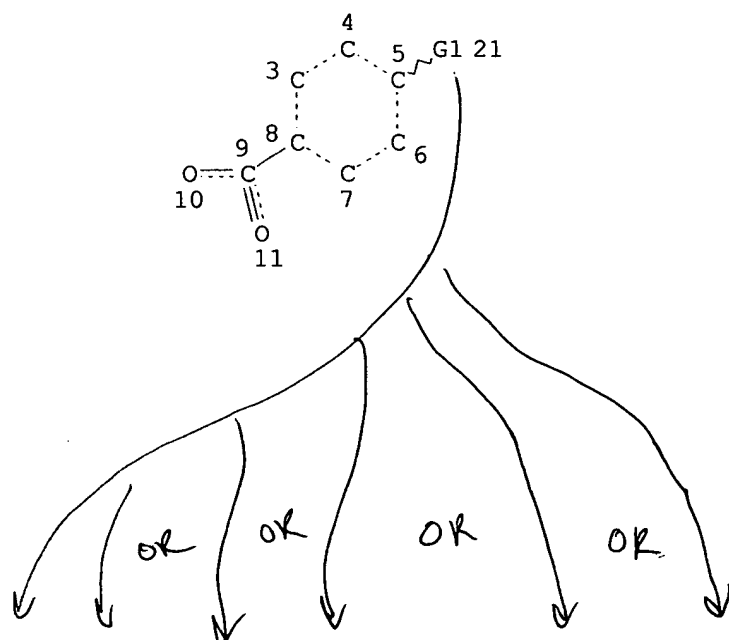
L11 SCR 1840 OR 1992

L12 685981 SEA FILE=REGISTRY ABB=ON PLU=ON 46.150.18/RID AND NR<3 AND  
NRS<3 NOT (P OR M OR S OR N)/ELS

L14 13375 SEA FILE=REGISTRY SUB=L12 SSS FUL L7 AND L10 NOT L11

L18 STR

subset str next pg



Ak @22 Ak~Si O~Ak O~Ak~Si X~Ak X~Ak~O  
 @24 25 @26 27 @28 29 30 31 @32 33 34 @35

VAR G1=22/24/26/28/32/35

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 10

CONNECT IS E1 RC AT 11

CONNECT IS E2 RC AT 24

CONNECT IS E2 RC AT 29

CONNECT IS E2 RC AT 32

CONNECT IS E2 RC AT 34

DEFAULT MLEVEL IS ATOM

GGCAT IS UNS AT 22

GGCAT IS UNS AT 27

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 23

STEREO ATTRIBUTES: NONE

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L22 86 SEA FILE=REGISTRY ABB=ON PLU=ON L21 AND SI/ELS

L23 51 SEA FILE=REGISTRY ABB=ON PLU=ON L22 AND O>2

L24 7 SEA FILE=REGISTRY ABB=ON PLU=ON L23 AND NC>1

L25 44 SEA FILE=REGISTRY ABB=ON PLU=ON L23 NOT L24

L26 10 SEA FILE=REGISTRY ABB=ON PLU=ON L25 AND SI=3

L27 2 SEA FILE=REGISTRY ABB=ON PLU=ON L26 AND " POLY[OXY(DIMETHYLSI  
 LYLENE)] "

L28 1 SEA FILE=REGISTRY ABB=ON PLU=ON L27 AND NR=2

L32 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L28

=&gt; d ibib abs hitstr 132 1

L32 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:695212 HCAPLUS

DOCUMENT NUMBER: 133:363256

TITLE: Supramolecular Association of Acid-Terminated Poly(dimethylsiloxane)s. 2. Molecular Weight Distributions

AUTHOR(S): Abed, S.; Boileau, S.; Bouteiller, L.

CORPORATE SOURCE: Laboratoire de Recherche sur les Polymeres, BP 28, UMR C7581, CNRS, Thiais, 94320, Fr.

SOURCE: Macromolecules (2000), 33(22), 8479-8487

CODEN: MAMOBX; ISSN: 0024-9297

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Assocn. through hydrogen bonding of benzoic acid-terminated poly(dimethylsiloxane) in low-polarity solvents was studied by FTIR spectroscopy and viscosimetry. At high concns., chain extension leads to high viscosity, whereas at low concns., intramol. hydrogen bonding is responsible for the formation of low-viscosity cyclic species. A quant. model based on Jacobson-Stockmayer theory and describing the competition between chain extension and macrocyclization is presented. On the basis of this model, the mol. wt. distributions of ring and chain fractions was calcd. as a function of concn. in three different solvents. The length of the siloxane backbone was shown to have a large influence on the cyclic wt. fraction and on the av. mol. wt.

IT 197844-30-7

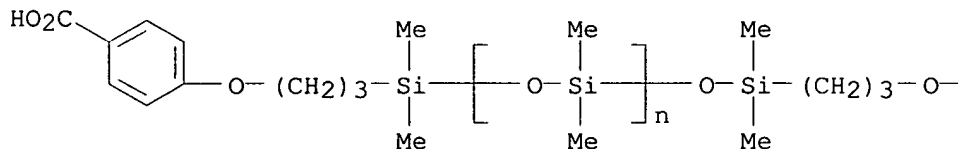
RL: PRP (Properties)

(chain extension and macrocyclization driven supramol. structures of propoxybenzoate-terminated poly(dimethylsiloxane)s via assocn. and hydrogen bonding)

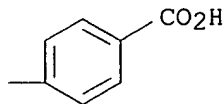
RN 197844-30-7 HCAPLUS

CN Poly[oxy(dimethylsilylene)], .alpha.-[[3-(4-carboxyphenoxy)propyl]dimethylsilyl]-.omega.-[[[3-(4-carboxyphenoxy)propyl]dimethylsilyl]oxy]- (9CI)  
(CA INDEX NAME)

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 39

REFERENCE(S):

- (1) Aakeroy, C; Chem Soc Rev 1993, V22, P397 HCAPLUS
- (2) Abed, S; Polym Bull 1997, V39, P317 HCAPLUS
- (3) Abed, S; Polym Prepr 1999, V40(2), P1117 HCAPLUS
- (4) Abed, S; Polym Prepr 1999, V40(2), P1132 HCAPLUS

LAMM 09/848,462

(7) Allen, G; Spectrochim Acta 1966, V22, P807 HCAPLUS  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=&gt; d ibib abs hitstr 132 2

L32 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:559247 HCAPLUS

DOCUMENT NUMBER: 132:181155

TITLE: Hetero-association in solution of telechelic polydimethylsiloxane bearing hydrogen bond donors with small acceptor molecules

AUTHOR(S): Abed, S.; Boileau, S.; Bouteiller, L.

CORPORATE SOURCE: Laboratoire de Recherche sur les Polymeres, Thiais, 94320, Fr.

SOURCE: Polym. Prepr. (Am. Chem. Soc., Div. Polym. Chem.) (1999), 40(2), 1132-1133

CODEN: ACPPAY; ISSN: 0032-3934

PUBLISHER: American Chemical Society, Division of Polymer Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Supramol. hetero-assocn. of a benzoic acid terminated telechelic polydimethylsiloxane with low mol. wt. hydrogen bond acceptor mols. has been studied in non polar solvents. The hydrogen bond acceptors bear two or more pyridine or phosphine oxide groups. Assocn. consts. have been detd. by FTIR and P NMR. Results show that the size of the supramol. assemblies strongly depends on the strength of the hetero-assocn. An interpretation of capillary viscosimetry results, which takes into account the competition between the different equil. involved, is proposed.

IT 197844-30-7

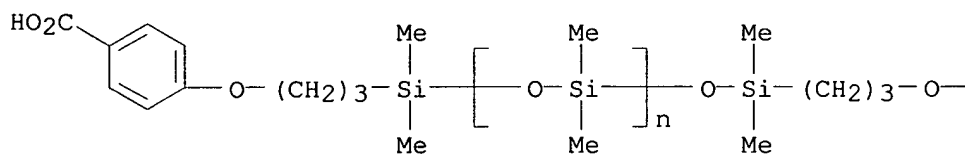
RL: PRP (Properties)

(hetero-assocn. in soln. of telechelic polydimethylsiloxane bearing hydrogen bond donors with small acceptor mols.)

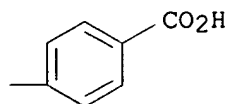
RN 197844-30-7 HCAPLUS

CN Poly[oxy(dimethylsilylene)], .alpha.-[[3-(4-carboxyphenoxy)propyl]dimethylsilyl]-.omega.-[[[3-(4-carboxyphenoxy)propyl]dimethylsilyl]oxy]- (9CI)  
(CA INDEX NAME)

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 8

REFERENCE(S):

- (1) Abed, S; Polym Bull 1997, V39, P317 HCAPLUS
- (3) Arnett, E; J Am Chem Soc 1970, V92, P2365 HCAPLUS
- (4) Friedrichsen, B; J Am Chem Soc 1990, V112, P8931 HCAPLUS
- (5) He, C; J Polym Sci Part B 1998, V36, P1617 HCAPLUS



LAMM 09/848,462

(6) Jerome, R; Microdomains in Polymer Solutions 1985,  
P243 HCAPLUS  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=&gt; d ibib abs hitstr 132 3

L32 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:559239 HCAPLUS

DOCUMENT NUMBER: 132:181153

TITLE: Supramolecular association of acid terminated polydimethylsiloxane in non polar solvents

AUTHOR(S): Abed, S.; Boileau, S.; Bouteiller, L.

CORPORATE SOURCE: Laboratoire de Recherche sur les Polymeres, Thiais, 94320, Fr.

SOURCE: Polym. Prepr. (Am. Chem. Soc., Div. Polym. Chem.) (1999), 40(2), 1117-1118

CODEN: ACPPAY; ISSN: 0032-3934

PUBLISHER: American Chemical Society, Division of Polymer Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Supramol. assocn. of benzoic acid terminated polydimethylsiloxane in nonpolar solvents (hexane and dichloromethane) is investigated.

IT 197844-30-7

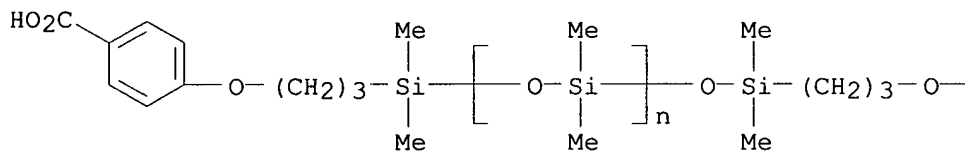
RL: PRP (Properties)

(supramol. assocn. of acid terminated polydimethylsiloxane in nonpolar solvents)

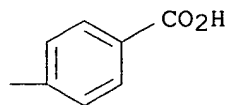
RN 197844-30-7 HCAPLUS

CN Poly[oxy(dimethylsilylene)], .alpha.-[[3-(4-carboxyphenoxy)propyl]dimethylsilyl]-.omega.-[[[3-(4-carboxyphenoxy)propyl]dimethylsilyl]oxy]- (9CI)  
(CA INDEX NAME)

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 8

REFERENCE(S):

- (1) Abed, S; Polym Bull 1997, V39, P317 HCAPLUS
  - (2) Hoshino, H; J: Appl Polym Sci 1984, V29, P547 HCAPLUS
  - (3) Kraus, G; Rubber Chem Technol 1969, V42, P800 HCAPLUS
  - (4) Lillya, C; Macromolecules 1992, V25, P2076 HCAPLUS
  - (6) Otocka, E; J Appl Phys 1969, V40, P4221 HCAPLUS
- ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 1997:658401 HCAPLUS

DOCUMENT NUMBER: 127:332050

TITLE: Supramolecular association of acid-terminated polydimethylsiloxanes. Part 1. Synthesis and characterization

AUTHOR(S):                   Abed, S.; Boileau, S.; Bouteiller, L.; Lacoudre, N.

CORPORATE SOURCE: Laboratoire Physico-Chimie Biopolymères, Thiais,  
F-94320, Fr.

SOURCE: Polym. Bull. (Berlin) (1997), 39(3), 317-324

CODEN: POBUDR; ISSN: 0170-0839

PUBLISHER: Springer

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Benzoic acid-terminated polydimethylsiloxanes (PDMS) were synthesized by hydrosilylation of allyloxybenzyl benzoate with SiH-terminated precursors followed by deprotection. These oligomers were characterized by <sup>1</sup>H, <sup>13</sup>C, and <sup>29</sup>Si-NMR, FTIR, and SEC in THF. Because of the flexibility and low polarity of the siloxane backbone, they are ideally suited to study the effect of H bonding on macromol. properties.

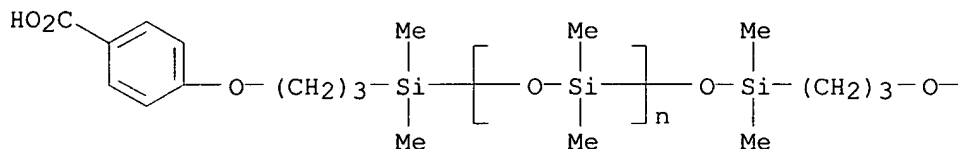
IT 197844-30-7P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of benzoic acid-terminated polydimethylsiloxanes and their  
supramol. assocn.)

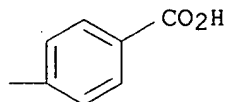
RN 197844-30-7 HCAPLUS

CN Poly[oxy(dimethylsilylene)], .alpha.-[[3-(4-carboxyphenoxy)propyl]dimethylsilyl]-.omega.-[[[3-(4-carboxyphenoxy)propyl]dimethylsilyl]oxy]- (9CI)  
(CA INDEX NAME)

PAGE 1-A



PAGE 1-B



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L33 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2001:390345 HCAPLUS

DOCUMENT NUMBER: 135:12123

TITLE: Positive-working resist laminate and fine pattern forming method using it

INVENTOR(S): Yasunami, Shoichiro

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 24 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

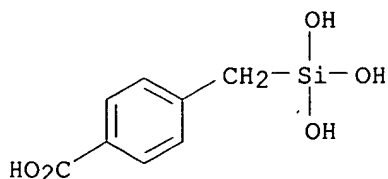
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 2001147538	A2	20010529	JP 1999-331568	19991122
AB	In the laminate comprising a support successively coated with 1st resist layer and 2nd resist layer, (i) the 1st resist layer is heat-curable and contains a polymer having a repeating unit $\text{CH}_2\text{R}_1(\text{CO}_2)\text{aL}_1\text{bL}_2\text{cM}$ ( $\text{R}_1 = \text{H}$ , alkyl, halo; $\text{L}_1\text{-L}_2 = \text{divalent linkage}$ ; $\text{M} = \text{arom. ring}$ ; $\text{a, b, c} = 0, 1$ ) and (ii) the 2nd layer contains (a) a polysiloxane or polysilsesquioxane having an acid-decomposable group and its soly. in an alkali developer increases by the action of an acid, and (b) a compd. generating an acid by irradiation of an actinic ray or radiation. The fine pattern is formed by (1) forming the 1st resist layer on the substrate and curing it by heat, (2) forming the 2nd resist layer on the 1st resist layer and patternwise exposing it with an actinic ray or radiation and alkali developing the 2nd layer, and (3) etching the 1st resist layer using the 2nd resist layer as a mask. The laminate is suited for far UV exposure, shows high resolution, and gives high accurate fine patterns and is useful for manufacture of semiconductor devices.				
IT	<b>341972-75-6</b>				
	RL: TEM (Technical or engineered material use); USES (Uses) (pos.-working resist laminate comprising 1st layer containing acrylic polymer and 2nd layer containing polysiloxane and acid generator)				
RN	341972-75-6 HCAPLUS				
CN	Benzoic acid, 4-[(trihydroxysilyl)methyl]-, polymer with 1,1-dimethylethyl 4-[(trihydroxysilyl)methyl]benzoate (9CI) (CA INDEX NAME)				

CM 1

CRN 341972-74-5

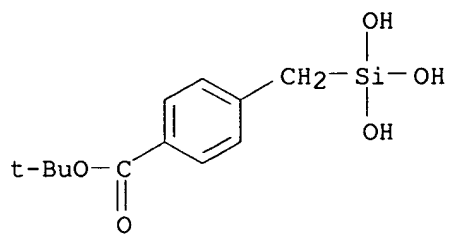
CMF C8 H10 O5 Si



CM 2

LAMM 09/848,462

CRN 341972-73-4  
CMF C12 H18 O5 Si



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L33 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:401896 HCAPLUS

DOCUMENT NUMBER: 133:44010

TITLE: Peroxidized polyorganosiloxanes, their preparation, and their use as bleaching agents

INVENTOR(S): Dromard, Adrien; Mignani, Gerard; Gambut, Lucile; Dallemer, Frederic

PATENT ASSIGNEE(S): Rhodia Chimie, Fr.

SOURCE: PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000034360	A1	20000615	WO 1999-FR2984	19991201
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2787114	A1	20000616	FR 1998-15715	19981209
FR 2787114	B1	20010216		

PRIORITY APPLN. INFO.: FR 1998-15715 A 19981209

AB Stabilized peroxidized polysiloxanes, prepd. by oxidn. of precursor polysiloxanes, form a novel oxidizing system useful as more stable bleaching agents, for example in dental or detergent compns. Thus, reaction of Me<sub>3</sub>Si(OSiMe<sub>2</sub>)<sub>9</sub>(OSiHMe)<sub>4</sub>OSiMe<sub>3</sub> with p-CH<sub>2</sub>:CHCH<sub>2</sub>OC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>SiMe<sub>3</sub> in the presence of a Pt catalyst, followed by deprotection of the carboxy groups, gave a precursor polysiloxane. Oxidn. of the precursor with excess H<sub>2</sub>O<sub>2</sub> gave a polysiloxane with 0.66% peracid content.

IT **217448-91-4DP**, peroxidized  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (prepn. of peroxidized polyorganosiloxanes as bleaching agents)

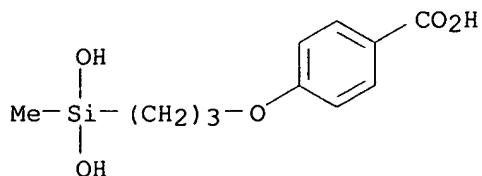
RN 217448-91-4 HCAPLUS

CN Benzoic acid, 4-[3-(dihydroxymethylsilyl)propoxy]-, polymer with dimethylsilanediol (9CI) (CA INDEX NAME)

CM 1

CRN 217448-90-3

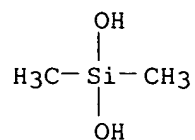
CMF C11 H16 O5 Si



CM 2

CRN 1066-42-8

CMF C2 H8 O2 Si



REFERENCE COUNT:

4

REFERENCE(S):

- (1) Anon; PATENT ABSTRACTS OF JAPAN 1988, V012(279), PC-517
- (2) Dow Corning Corp; GB 897973 A 1962
- (3) Joy, J; US 3726943 A 1973 HCAPLUS
- (4) Nippon Oil & Fats Co Ltd; JP 63057643 A 1988 HCAPLUS

=&gt; d ibib abs hitstr 133 3

L33 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1998:666056 HCAPLUS

DOCUMENT NUMBER: 129:316820

TITLE: Dielectric relaxation and relationship of local molecular mobility in linear and comb-like thermotropic polymers

AUTHOR(S): Borisova, Tamara I.; Nikonorova, Natalia A.

CORPORATE SOURCE: Inst. Macromolecular Compounds, St. Petersburg, 199004, Russia

SOURCE: Macromol. Chem. Phys. (1998), 199(10), 2147-2152

CODEN: MCHPES; ISSN: 1022-1352

PUBLISHER: Huethig &amp; Wepf Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The dielec. behavior of several thermotropic linear and comb-like polymers with flexible spacers and mesogenic fragments with different structure was studied in a frequency range from 60 Hz to 1 MHz in the bulk state (below the glass transition temp.). Two regions of dipole relaxation caused by local mobility were detected. It was shown that the relaxation parameters of the first process virtually do not change with increasing spacer length and have similar values in polymers with different structure. In the case of the second process, the increase in spacer length considerably increases the mobility of kinetic elements.

IT 148481-13-4

RL: PRP (Properties)

(dielec. relaxation and local mol. mobility in thermotropic linear polyesters)

RN 148481-13-4 HCAPLUS

CN 2-Butenedioic acid (2E)-, bis(4-carboxyphenyl) ester, polymer with (1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis[methanol] (9CI) (CA INDEX NAME)

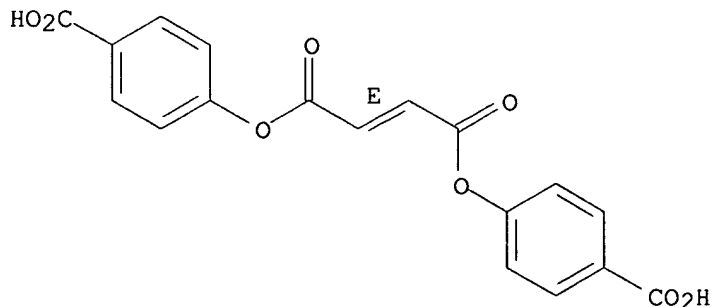
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CRN 99125-21-0

CMF C18 H12 O8

CDES 2:E

Double bond geometry as shown.



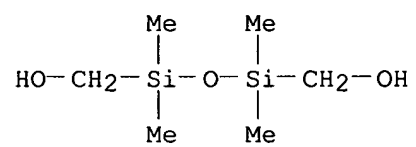
CM 2

CRN 5833-59-0



LAMM 09/848,462

CMF C6 H18 O3 Si2



=&gt; d ibib abs hitstr 133 4

L33 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1996:465612 HCAPLUS

DOCUMENT NUMBER: 125:115789

TITLE: Dipole polarization relaxation and molecular structure of main- and side-chain liquid-crystalline polymers

AUTHOR(S): Stepanova, T. P.; Burshtein, L. L.

CORPORATE SOURCE: Inst. of Macromolecular Compounds of Russian Academy of Sciences, Petersburg, 199004, Russia

SOURCE: Chin. J. Polym. Sci. (1996), 14(1), 1-18

CODEN: CJPSEG; ISSN: 0256-7679

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Mol. mobility in thermotropic polyesters and side-chain polymers with different structure of mesogens and spacers was studied by dielec. method in dil. solns. The results made it possible to establish the multiplicity of dielec. relaxation transitions which reflects the small- and large-scale types of mol. motion. The dielec. relaxation processes occurring in accordance with local mechanism (relaxation times 10<sup>-9</sup>-10<sup>-7</sup>s. and the activation energy 10-50 kJ/mol) are due to the mobility of kinetic chain elements of different length within a monomer units. The dielec. relaxation process connected with a large-scale form of mol. motion (relaxation times 10<sup>-5</sup>-10<sup>-6</sup>s. and the activation energy 100 J/mol) did not depend on the mol. mass but was influenced by factors changing the conformational state of the macromol. The cooperative reorientation mobility of assocd. mesogenic fragments is the source of the large-scale process.

IT 148481-13-4

RL: PRP (Properties)

(dipole polarization relaxation and mol. structure of main- and side-chain liq.-crystal polyesters)

RN 148481-13-4 HCAPLUS

CN 2-Butenedioic acid (2E)-, bis(4-carboxyphenyl) ester, polymer with (1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis[methanol] (9CI) (CA INDEX NAME)

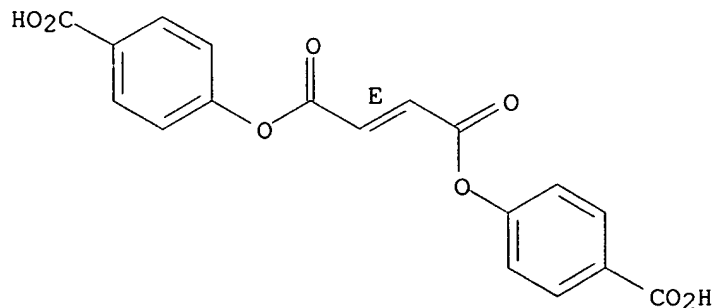
CM 1

CRN 99125-21-0

CMF C18 H12 O8

CDES 2:E

Double bond geometry as shown.

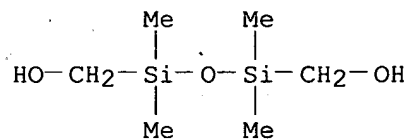


LAMM 09/848,462

CM 2

CRN 5833-59-0

CMF C6 H18 O3 Si2



=&gt; d ibib abs hitstr 133 5

L33 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1993:473546 HCAPLUS

DOCUMENT NUMBER: 119:73546

TITLE: Dipole moment and mutual orientation of mesogenic fragments in linear liquid-crystalline polyester in solution

AUTHOR(S): Stepanova, T. P.; Merkur'eva, A. A.; Zuev, V. V.; Burshtein, L. L.; Birshtein, T. M.; Skorokhodov, S. S.

CORPORATE SOURCE: Inst. Vysokomol. Soedin, St.-Petersburg, Russia

SOURCE: Vysokomol. Soedin., Ser. A (1992), 34(10), 31-44

CODEN: VYSAAF; ISSN: 0507-5475

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB Dipole moments of linear liq.-cryst. (O<sub>2</sub>C-p-C<sub>6</sub>H<sub>4</sub>O<sub>2</sub>CCH:CHCO<sub>2</sub>-p-C<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>CH<sub>2</sub>SiMe<sub>2</sub>OSiMe<sub>2</sub>CH<sub>2</sub>)<sub>n</sub> (I) and its low-mol.-wt. analog bis[p-(decyloxycarbonyl)phenyl] fumarate (II) were measured in PhMe dil. solns. at 20-80.degree.. The conformational anal. of I was based on the interpretation of the linear polyester as a regular copolymer with several polar components. Methods of conformational statistics based on rotational isomer theory were generalized for these mols. In the mesogenic fragment, a no. of plain cis- and trans-conformations with the energy barrier 2.5 kJ/mol. were obsd. The calcd. temp. dependence of the dipole moment of the mesogen was in good agreement with the exptl. dependence for II.

IT 148481-13-4

RL: PRP (Properties)

(liq.-cryst., dipole moment and mutual orientation of mesogenic fragments in linear, in soln.)

RN 148481-13-4 HCAPLUS

CN 2-Butenedioic acid (2E)-, bis(4-carboxyphenyl) ester, polymer with (1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis[methanol] (9CI) (CA INDEX NAME)

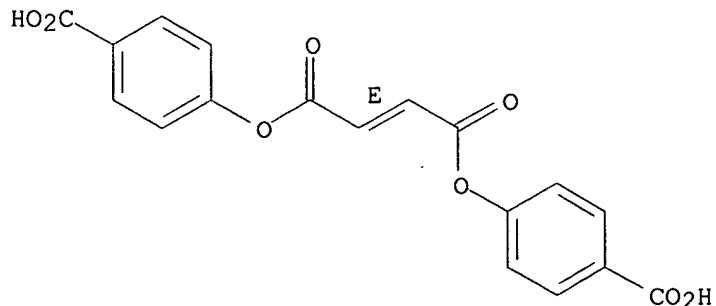
CM 1

CRN 99125-21-0

CMF C18 H12 O8

CDES 2:E

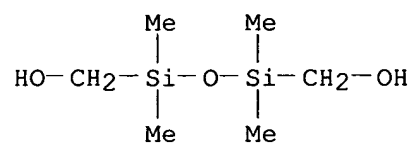
Double bond geometry as shown.



CM 2

LAMM 09/848,462

CRN 5833-59-0  
CMF C6 H18 O3 Si2



LAMM 09/848,462

=> d ibib abs hitstr 133 6

5 ANSWERS ARE AVAILABLE. SPECIFIED ANSWER NUMBER EXCEEDS ANSWER SET SIZE  
The answer numbers requested are not in the answer set.

=&gt; d ibib abs hitstr 1

L37 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1997:667718 HCAPLUS  
 DOCUMENT NUMBER: 127:278307  
 TITLE: Preparation of silyl derivatives of salicylic acid with desquamative properties  
 INVENTOR(S): Richard, Herve; Leduc, Madeleine; Lagrange, Alain  
 PATENT ASSIGNEE(S): L'Oreal S. A., Fr.  
 SOURCE: Eur. Pat. Appl., 19 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 796861	A1	19970924	EP 1997-400432	19970226
EP 796861	B1	19980408		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
FR 2746397	A1	19970926	FR 1996-3622	19960322
FR 2746397	B1	19980430		
AT 164846	E	19980415	AT 1997-400432	19970226
ES 2117901	T3	19980816	ES 1997-400432	19970226
JP 10007688	A2	19980113	JP 1997-67013	19970319
JP 2965524	B2	19991018		
CA 2200771	AA	19970922	CA 1997-2200771	19970321
US 5756485	A	19980526	US 1997-821798	19970321
US 5976558	A	19991102	US 1998-4303	19980108
US 5900231	A	19990504	US 1998-134430	19980814
US 5906812	A	19990525	US 1998-134433	19980814
PRIORITY APPLN. INFO.:			FR 1996-3622	19960322
			US 1997-821798	19970321
			US 1998-4303	19980108

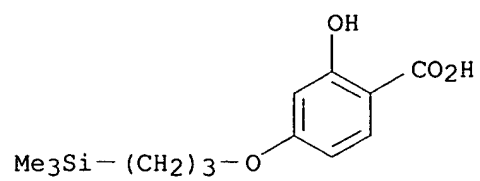
AB B1SiRaRbO[SiRcRdO]r[SiAReO]sSiRfRgB2 (Ra-Rg = C1-10 alkyl, C2-10 alkenyl, Ph, 3,3,3-trifluoropropyl for which at least 80% of the radicals are Me; A = 2-R1C6H4CO2R3 substituted by (R2)m and XnZpCHYCH2- (R1 = OH, C1-4 alkoxy, acyloxy; R2 = OH, C1-8 alkyl, C2-8 alkenyl, C1-8 alkoxy or 2 R2 may form an C1-2 alkanedioxy group; R3 = H, pharmaceutically acceptable cation, C1-6 alkyl, C2-6 alkenyl, benzyl; m = 0-2; p = 0, 1; X = O, NH, C:O, NHC(O)NH, NHC(O), C(O)NH; n = 0, 1; Z = C1-6 alkanediyl; Y = H, OH, C2-8 alkoxy); B1, B2 = Ra-Rg, A; r = 0-50; s = 0-20), cyclo-[SiRcRdO]t[SiAReO]u (u = 1-6; t = 0-10; t + u .gtoreq. 3), and ASiR1'R2'R3' (R1', R2', R3' = C1-8 alkyl, C2-8 alkenyl, Ph, C1-4 alkoxy) and their use in cosmetic or dermatol. compns., because they assist desquamation of skin and stimulate epidermal renewal, are claimed. For example, a mixt. of Me 2,4-dihydroxybenzoate and K2CO3 in DMF were reacted with (ClCH2CH2CH2)SiMe3 to give 57% Me 2-hydroxy-4-(3-trimethylsilylpropyloxy)benzoate, which was hydrolyzed in 93% yield by K/EtOH/H2O followed by dil. HCl; the product is quite effective in in vitro desquamation tests on keratinocytes.

IT 196807-22-4P, 2-Hydroxy-4-(3-trimethylsilylpropyloxy)benzoic acid  
 RL: BAC (Biological activity or effector, except adverse); BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of silyl derivs. of salicylic acid with desquamative properties)

RN 196807-22-4 HCAPLUS  
 CN Benzoic acid, 2-hydroxy-4-[3-(trimethylsilyl)propoxy]- (9CI) (CA INDEX

LAMM 09/848,462

NAME)





=&gt; d ibib abs hitstr 1-24

L38 ANSWER 1 OF 24 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:788401 HCAPLUS

DOCUMENT NUMBER: 134:49479

TITLE: New mesogens with cubic phases: hydrogen-bonded  
bipyridines and siloxane-containing benzoic acids I.  
Preparation and phase behavior

AUTHOR(S): Nishikawa, Etsushi; Samulski, Edward T.

CORPORATE SOURCE: Venable and Kenan Laboratories, Department of  
Chemistry, The University of North Carolina at Chapel  
Hill, Chapel Hill, NC, 27599-3290, USA

SOURCE: Liq. Cryst. (2000), 27(11), 1457-1462

CODEN: LICRE6; ISSN: 0267-8292

PUBLISHER: Taylor &amp; Francis Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

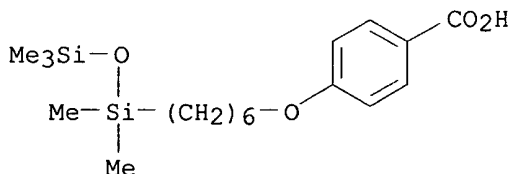
AB Several 4-(oligodimethylsiloxyl)alkoxybenzoic acids and their H-bonded complexes with 4,4'-dipyridyl or 1,2-bis(4-pyridyl)ethane were prep'd. and their phase behavior studied by DSC and polarized optical microscopy. The neat acids showed no liq. cryst. phases. The 4,4'-dipyridyl complex of 4-(n-heptamethyltrisiloxyl)hexyloxybenzoic acid (Si3C6BA) exhibits an optically isotropic, highly viscous liq. cryst. phase below a smectic A phase. The 1,2-bis(4-pyridyl)ethane complex of Si3C6BA also shows an optically isotropic liq. cryst. phase above its smectic C phase. Its behavior is similar to that of the known cubic D phase found in 4'-n-alkoxy-3'-nitrobiphenyl-4-carboxylic acids. In the hydrogenbonded mesogens studied herein, the cubic phase appears to assemble spontaneously to take account of the chem. incompatibility between the siloxane moiety terminating the H-bonded complex and the stiff arom. cores. The transition temps. of the cubic phases in these materials is .apprx.100.degree., hence they are amenable to a variety of phys. measurements.

IT 204185-98-8P

RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)  
(prepn. and phase transitions of)

RN 204185-98-8 HCAPLUS

CN Benzoic acid, 4-[[6-(pentamethyldisiloxanyl)hexyl]oxy]- (9CI) (CA INDEX NAME)

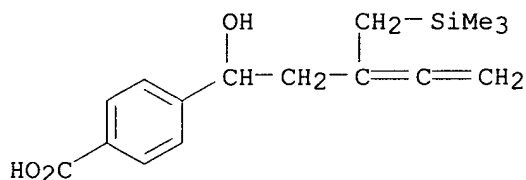


REFERENCE COUNT: 22

REFERENCE(S): (1) Alstermark, C; Liq Cryst 1990, V8, P75 HCAPLUS  
(4) Diele, S; Mol Cryst liq Cryst 1972, V17, P163 HCAPLUS  
(5) Donnio, B; Liq Cryst 1997, V23, P147 HCAPLUS  
(6) Etherington, G; Liq Cryst 1988, V3, P155 HCAPLUS  
(7) Goring, P; Liq Cryst 1998, V25, P467 HCAPLUS  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 2 OF 24 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:698509 HCAPLUS  
 DOCUMENT NUMBER: 134:29459  
 TITLE: Indium-mediated synthesis of 2-(2-hydroxyethyl)homoallenylsilanes  
 AUTHOR(S): Ho Lee, P.; Bang, K.; Lee, K.; Lee, C.-H.; Chang, S.  
 CORPORATE SOURCE: Department of Chemistry, Kangwon National University, Chuncheon, 200-701, S. Korea  
 SOURCE: Tetrahedron Lett. (2000), 41(39), 7521-7524  
 CODEN: TELEAY; ISSN: 0040-4039  
 PUBLISHER: Elsevier Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 134:29459  
 AB Indium-mediated homoallenylation of aldehydes with 4-bromo-3-[(trimethylsilyl)methyl]-1,2-butadiene in DMF afforded 2-(2-hydroxyethyl)homoallenylsilanes at room temp. in 73-92% yields.  
 IT **312298-19-4P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (indium-mediated synthesis of hydroxyethylhomoallenylsilanes)  
 RN 312298-19-4 HCAPLUS  
 CN Benzoic acid, 4-[1-hydroxy-3-[(trimethylsilyl)methyl]-3,4-pentadienyl]-(9CI) (CA INDEX NAME)



REFERENCE COUNT: 23  
 REFERENCE(S): (1) Bardot, V; Synlett 1996, P37 HCAPLUS  
 (2) Beuchet, P; Tetrahedron Lett 1992, V33, P5959 HCAPLUS  
 (3) Blanco, F; Tetrahedron Lett 1994, V35, P8881 HCAPLUS  
 (4) Bryan, V; Tetrahedron Lett 1996, V37, P5341 HCAPLUS  
 (5) Chan, T; Tetrahedron Lett 1998, V39, P8605 HCAPLUS  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 3 OF 24 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1999:559239 HCAPLUS  
 DOCUMENT NUMBER: 132:181153  
 TITLE: Supramolecular association of acid terminated polydimethylsiloxane in non polar solvents  
 AUTHOR(S): Abed, S.; Boileau, S.; Bouteiller, L.  
 CORPORATE SOURCE: Laboratoire de Recherche sur les Polymères, Thiais, 94320, Fr.  
 SOURCE: Polym. Prepr. (Am. Chem. Soc., Div. Polym. Chem.) (1999), 40(2), 1117-1118  
 CODEN: ACPPAY; ISSN: 0032-3934  
 PUBLISHER: American Chemical Society, Division of Polymer Chemistry  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Supramol. assocn. of benzoic acid terminated polydimethylsiloxane in

IT



8

- L38 ANSWER 4 OF 24 HCAPLUS COPYRIGHT 2001 ACS

1998:502570 HCAPLUS

129:95787

Induction of Smectic Layering in Nematic Liquid Crystals Using Immiscible Components. 2. Laterally Attached Side-Chain Liquid-Crystalline Poly(norbornene)s and Their Low-Molar-Mass Analogs with Hydrocarbon/Oligodimethylsiloxane Substituents

Pugh, Coleen; Bae, Jin-Young; Dharia, Jayesh; Ge, Jason J.; Cheng, Stephen Z. D.

Department of Chemistry Macromolecular Science and  
Engineering Center, University of Michigan, Ann Arbor,  
MI. 48109-1055, USA

Macromolecules (1998), 31(16), 5188-5200

CODEN: MAMOBX; ISSN: 0024-9297

American Chemical Society

Journal

English

hydroca

AB

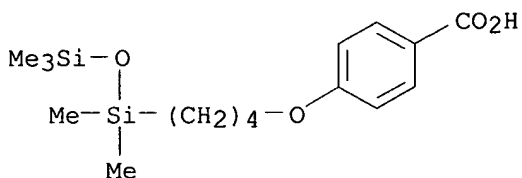
5-{[[2',5'-bis[(4''-(n-(oligodimethylsiloxyl)alkoxy)benzoyl)oxy]benzyl]oxy]carbonyl}bicyclo[2.2.1]hept-2-enes were polymd. by ring-opening metathesis polymn. in THF at room temp. using Mo(CHCMe<sub>2</sub>Ph)(N-2,6-iPr<sub>2</sub>Ph)(OtBu)<sub>2</sub> as the initiator.

IT 204185-96-6P 204185-97-7P 204185-98-8P  
204185-99-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(in synthesis of polyester laterally attached side-chain liq.-cryst.  
poly(norbornene)s and low-molar-mass analogs with  
hydrocarbon/oligodimethylsiloxane substituents)

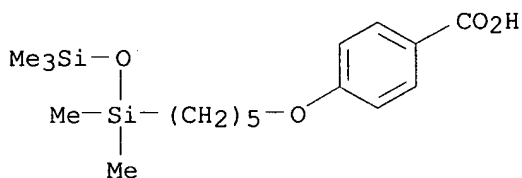
RN 204185-96-6 HCAPLUS

CN Benzoic acid, 4-[4-(pentamethyldisiloxanyl)butoxy]- (9CI) (CA INDEX NAME)



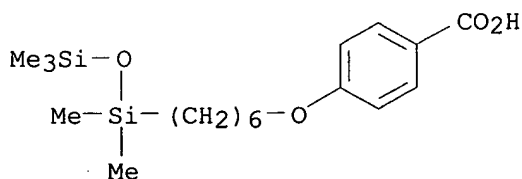
RN 204185-97-7 HCAPLUS

CN Benzoic acid, 4-[[5-(pentamethyldisiloxanyl)pentyl]oxy]- (9CI) (CA INDEX NAME)



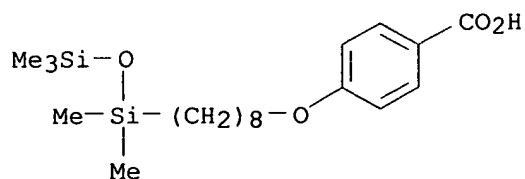
RN 204185-98-8 HCAPLUS

CN Benzoic acid, 4-[[6-(pentamethyldisiloxanyl)hexyl]oxy]- (9CI) (CA INDEX NAME)



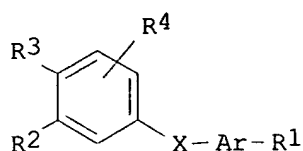
RN 204185-99-9 HCAPLUS

CN Benzoic acid, 4-[[8-(pentamethyldisiloxanyl)octyl]oxy]- (9CI) (CA INDEX NAME)

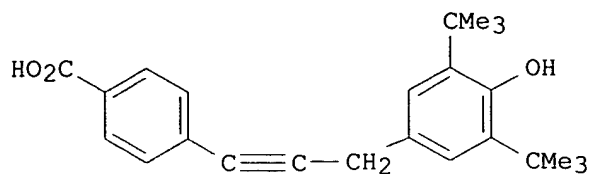


L38 ANSWER 5 OF 24 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1997:623137 HCAPLUS  
 DOCUMENT NUMBER: 127:292999  
 TITLE: Diaromatic propynyl or dienyl compounds for use in  
 treating disorders of cell differentiation, cell  
 proliferation, and keratinization  
 INVENTOR(S): Bernardon, Jean-Michel  
 PATENT ASSIGNEE(S): Centre International De Recherches Dermatologiques  
 Galderma (C.I.R.D. Galder, Fr.; Bernardon, Jean-Michel  
 SOURCE: PCT Int. Appl., 49 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9733856	A1	19970918	WO 1997-FR390	19970305
W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, GH, HU, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
FR 2746098	A1	19970919	FR 1996-3234	19960314
FR 2746098	B1	19980430		
CA 2218892	AA	19970918	CA 1997-2218892	19970305
AU 9720304	A1	19971001	AU 1997-20304	19970305
AU 703505	B2	19990325		
EP 832057	A1	19980401	EP 1997-908307	19970305
EP 832057	B1	20010103		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
CN 1193313	A	19980916	CN 1997-190539	19970305
JP 10510849	T2	19981020	JP 1997-532317	19970305
JP 3181297	B2	20010703		
BR 9702144	A	19990105	BR 1997-2144	19970305
AT 198467	E	20010115	AT 1997-908307	19970305
ES 2156366	T3	20010616	ES 1997-908307	19970305
NO 9705191	A	19980114	NO 1997-5191	19971112
US 6046220	A	20000404	US 1998-952302	19980126
PRIORITY APPLN. INFO.:			FR 1996-3234	A 19960314
			WO 1997-FR390	W 19970305
OTHER SOURCE(S):		MARPAT 127:292999		
GI				



I



II

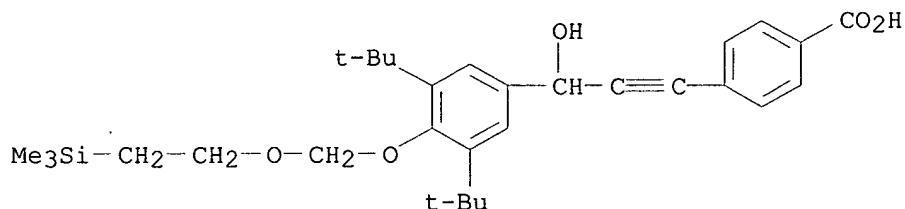
AB Title compds. I [Ar = (un)substituted Ph, furyl, thienyl, pyrrolyl, pyridyl; X = (un)substituted CH<sub>2</sub>C.tplbond.C, C.tplbond.CCH<sub>2</sub>, CH:CHCH:CH;H; R<sub>1</sub> = Me, CH<sub>2</sub>OR<sub>5</sub>, OR<sub>5</sub>, COR<sub>6</sub>; R<sub>2</sub>, R<sub>3</sub> = H, alkyl, OR<sub>5</sub>, SR<sub>5</sub>; R<sub>2</sub>R<sub>3</sub> = alkylene, oxaalkylene, thiaalkylene; R<sub>4</sub> = H, halogen, alkyl, OR<sub>5</sub>; R<sub>5</sub> = H, alkyl, acyl; R<sub>6</sub> = H, alkyl, (un)substituted NH<sub>2</sub>] were prepd. Thus, the acid II was obtained from 4,3,5-HO(Me<sub>3</sub>C)2C<sub>6</sub>H<sub>2</sub>CHO and Me<sub>3</sub>SiC.tplbond.CH in 7 steps.

IT 196956-71-5P 196956-75-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(diarom. propynyl or dienyl compds. for use in treating disorders of cell differentiation, cell proliferation, and keratinization)

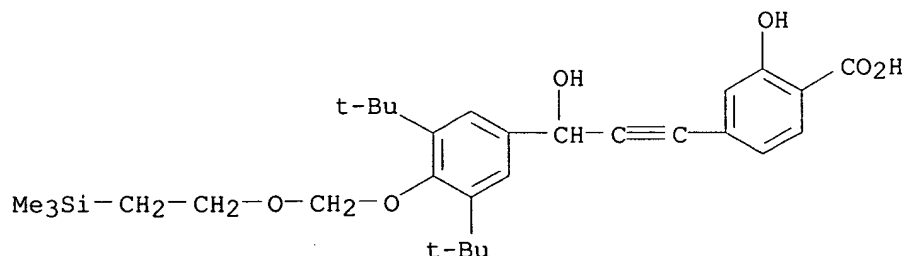
RN 196956-71-5 HCAPLUS

CN Benzoic acid, 4-[3-[3,5-bis(1,1-dimethylethyl)-4-[[2-(trimethylsilyl)ethoxy]methoxy]phenyl]-3-hydroxy-1-propynyl]- (9CI) (CA INDEX NAME)



RN 196956-75-9 HCAPLUS

CN Benzoic acid, 4-[3-[3,5-bis(1,1-dimethylethyl)-4-[[2-(trimethylsilyl)ethoxy]methoxy]phenyl]-3-hydroxy-1-propynyl]-2-hydroxy- (9CI) (CA INDEX NAME)



L38 ANSWER 6 OF 24 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1997:12558 HCAPLUS

DOCUMENT NUMBER: 126:89877

TITLE: Side-Chain Liquid-Crystalline Polysiloxanes via Anionic Polymerization: (n-Undecyloxyarene)carboxylic

Acid Mesogens Linked to Poly(dimethylsiloxane-co-methylvinylsiloxane)

AUTHOR(S): Hempenius, Mark A.; Lammertink, Rob G. H.; Vancso, G. Julius

CORPORATE SOURCE: University of Twente, Enschede, 7500 AE, Neth.

SOURCE: Macromolecules (1997), 30(2), 266-272  
CODEN: MAMOBX; ISSN: 0024-9297

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

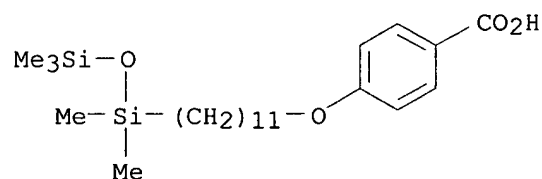
LANGUAGE: English

AB A novel, anionic route to well-defined side-chain liq.-cryst. polysiloxanes is described. The usual cationic approach to these polymers leads to polydisperse materials with uncontrolled microstructures. Ring-opening polymn. of pentamethylvinylcyclotrisiloxane yielded a poly(dimethylsiloxane-co-methylvinylsiloxane) with a low polydispersity (.hivin.Mw/.hivin.Mn = 1.16), a controlled molar mass, and a uniform distribution of pendant vinyl groups along the chain. Vinyl-contg. mesogenic mols. could be attached to the polysiloxane vinyl groups in a two-step hydrosilylation reaction by means of the coupling agent 1,1,3,3-tetramethyldisiloxane, yielding polymers with regularly spaced side groups. The flexible disiloxane link increases the mobility of the mesogenic moieties. In this study, 4-(n-undecyloxy)benzoic acid and the novel side group 4'-(n-undecyloxy)-4-biphenylcarboxylic acid were used as mesogens. The thermal behavior of the side-chain liq.-cryst. polymers was investigated by means of differential scanning calorimetry and optical microscopy.

IT 185532-02-9P  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(model compd. mesogen; in prepn. of side-chain liq.-cryst. siloxanes contg. n-undecyloxyarene-carboxylic acid mesogens linked to poly(dimethylsiloxane-co-methylvinylsiloxane) via flexible disiloxane link)

RN 185532-02-9 HCAPLUS

CN Benzoic acid, 4-[[11-(pentamethyldisiloxanyl)undecyl]oxy]- (9CI) (CA INDEX NAME)



L38 ANSWER 7 OF 24 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1996:645197 HCAPLUS

DOCUMENT NUMBER: 125:316403

TITLE: Evaluation of differentiation-inducing activity of retinoids on human leukemia cell lines HL-60 and NB4

AUTHOR(S): Hashimoto, Yuichi; Kagechika, Hiroyuki; Kawachi, Emiko; Fukasawa, Hiroshi; Saito, Go; Shudo, Koichi

CORPORATE SOURCE: Faculty of Pharmaceutical Sciences, University of Tokyo, Tokyo, 113, Japan

SOURCE: Biol. Pharm. Bull. (1996), 19(10), 1322-1328  
CODEN: BPBLEO; ISSN: 0918-6158

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Retinoids, including all-trans-retinoic acid (ATRA), its isomers, and

fifty synthetic retinoids (retinobenzoic acids), were tested for differentiation-inducing activity on human leukemia cell lines HL-60 and NB4. Binding activity of typical retinoids to nuclear retinoic acid receptors (RARs) was also investigated. A good linear correlation between the ED50 values of differentiation-inducing activity towards HL-60 cells and those towards NB4 cells was found. Binding activities of retinoids to RAR.alpha. and RAR.beta. also correlated well to the differentiation-inducing activities.

IT 125973-57-1, Ch 60S 125973-58-2, Ch 55S

125973-59-3, Ch 40S

RL: BAC (Biological activity or effector, except adverse); PRP

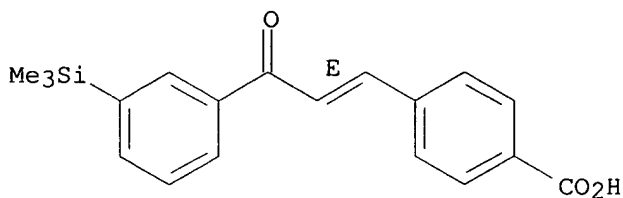
(Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(differentiation-inducing activity of retinoids on human leukemia cell lines correlated with binding activities of retinoids to retinoic acid receptors)

RN 125973-57-1 HCAPLUS

CN Benzoic acid, 4-[3-oxo-3-[3-(trimethylsilyl)phenyl]-1-propenyl]-, (E)-  
(9CI) (CA INDEX NAME)

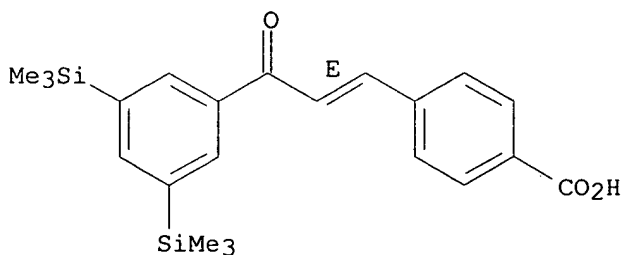
Double bond geometry as shown.



RN 125973-58-2 HCAPLUS

CN Benzoic acid, 4-[3-[3,5-bis(trimethylsilyl)phenyl]-3-oxo-1-propenyl]-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

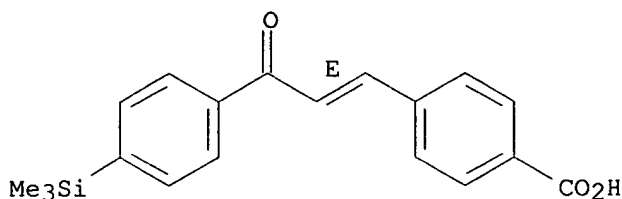


RN 125973-59-3 HCAPLUS

CN Benzoic acid, 4-[3-oxo-3-[4-(trimethylsilyl)phenyl]-1-propenyl]-, (E)-  
(9CI) (CA INDEX NAME)

Double bond geometry as shown.





L38 ANSWER 8 OF 24 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1996:356080 HCAPLUS

DOCUMENT NUMBER: 125:72487

TITLE: Syntheses and liquid crystalline properties of the compounds having a siloxylethylene group and a terminal substituent

AUTHOR(S): Yang, Seong Hun; Hong, Wan Hae; Yu, Euy Kyung  
CORPORATE SOURCE: Dep. Bio Chem., College Med. Chosun Univ., Kwangju, 501-759, S. Korea

SOURCE: J. Korean Chem. Soc. (1996), 40(5), 365-373

CODEN: JKCSEZ; ISSN: 1017-2548

DOCUMENT TYPE: Journal

LANGUAGE: Korean

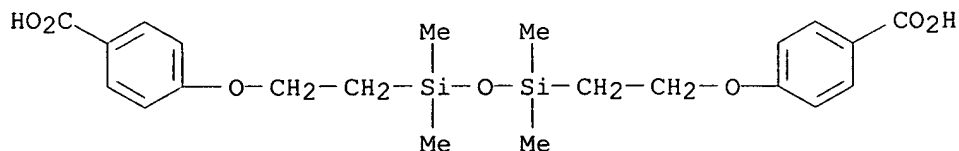
AB New dimesogenic compds., di-4-(p-substituted phenoxy carbonyl)phenoxyethyl tetramethyldisiloxanes, were prepd. and identified. Another compd. having a .beta.-naphthyl group in the place of a p-substituted Ph ring was also synthesized. The compds. were synthesized with considerably high yields at 85-95%. All of the compds. are enantiotropic and form smectic phase in melt, the compd. with X = NO<sub>2</sub> is SA while the remaining ones are SB. Liq. cryst. phase transition of the compds. were influenced in corporations of the size and electron affinity of the substituent. The heats of melting .DELTA.H<sub>m</sub>, are particularly low, while the heats of isotropization, .DELTA.H<sub>i</sub>, are comparable to other dimesogenic compds. The smectic group efficiency of the substituents in the compds. is in the order of H<CH<sub>3</sub><Cl = NO<sub>2</sub><CN<CN<OCH<sub>3</sub><C<sub>6</sub>H<sub>5</sub>.

IT 178558-29-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and reaction with sulfonyl chloride of)

RN 178558-29-7 HCAPLUS

CN Benzoic acid, 4,4'-[(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis(2,1-ethanedioxy)]bis- (9CI) (CA INDEX NAME)



L38 ANSWER 9 OF 24 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1995:761726 HCAPLUS

DOCUMENT NUMBER: 123:145012

TITLE: Polymeric liquid crystal compounds and dielectric liquid crystal compositions containing them

INVENTOR(S): Moriwaki, Fumio; Endo, Hiroyuki; Hacha, Satoshi

PATENT ASSIGNEE(S): Idemitsu Kosan Co, Japan

SOURCE: Jpn. Kokai Tokyo Koho, 24 pp.

DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07149909	A2	19950613	JP 1993-323395	19931130

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\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

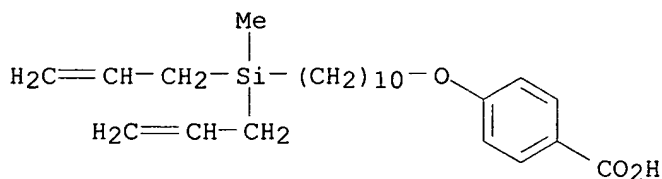
AB Polymers with structural unit I (m, n = 2-5; a = 4-16; b = 0-3; c = 1-7; p = 0, 1; Y = di-Me polysiloxy group, -SiMe<sub>2</sub>(CH<sub>2</sub>)<sub>j</sub>-; j = 1-4) show chiral smectic C phase across broad range of temp. including room temp. and promptly response to the changes in elec. field. The polymers are synthesized by the reaction of diene monomer II (m, n = 2-5; a = 4-16; b = 0-3; c = 1-7; p = 0, 1) and a Si-H-contg. silane. A highly dielec. liq. crystal compn. consists of the above polymers and a low-mol. wt. smectic liq. crystal compd.

IT 167024-25-1P 167024-32-0P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation)  
 (prepn. of polymeric liq. crystal compds.)

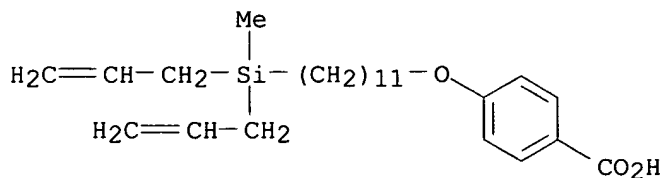
RN 167024-25-1 HCAPLUS

CN Benzoic acid, 4-[[10-(methyldi-2-propenylsilyl)decyl]oxy]- (9CI) (CA INDEX NAME)



RN 167024-32-0 HCAPLUS

CN Benzoic acid, 4-[[11-(methyldi-2-propenylsilyl)undecyl]oxy]- (9CI) (CA INDEX NAME)



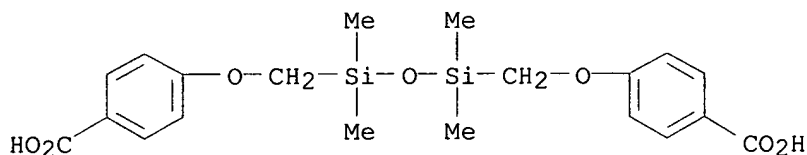
L38 ANSWER 10 OF 24 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1995:688936 HCAPLUS

DOCUMENT NUMBER: 123:128421

TITLE: Synthesis and phase behavior of 1,3-bis(mesogenes)-

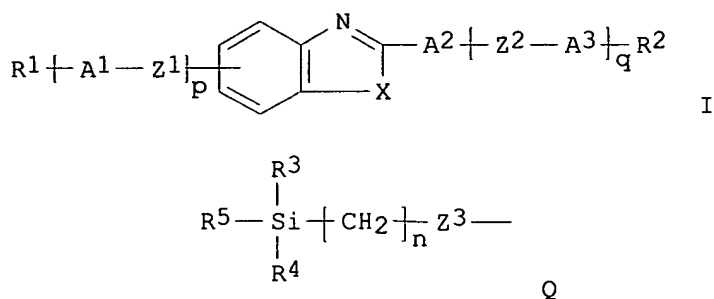
1,1,3,3-tetramethyldisiloxanes  
 AUTHOR(S): Zhang Xian-Liang; Zhang Jian-Qiang; Wang Cheng-Rui;  
 Zhuo Ren-Xi  
 CORPORATE SOURCE: Department of Chemistry, Wuhan University, Wuhan,  
 430072, Peop. Rep. China  
 SOURCE: Gaodeng Xuexiao Huaxue Xuebao (1995), 16(3), 471-6  
 CODEN: KTHPDM; ISSN: 0251-0790  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Chinese  
 AB Sixteen 1,3-bis(mesogens)-1,1,3,3-tetramethyl disiloxanes were  
 synthesized, and their chem. structures were confirmed by 1H NMR, IR, UV  
 and elemental anal. Their phase behaviors were also investigated by DSC  
 and polarizing microscope. Twelve of the 16 compds. exhibit the  
 liq.-cryst. (LC) phase transition. X-ray diffraction was used to  
 investigate the crystal structure of 1,3-bis(4-methylazobenzene-oxy-  
 methyl)-1,1,3,3-tetramethyl disiloxane. The influence of chem. structures  
 of these novel siloxane compds. on LC phase behaviors were discussed.  
 IT 82345-25-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (in synthesis of 1,3-bis(mesogenes)-1,1,3,3-tetramethyldisiloxanes)  
 RN 82345-25-3 HCAPLUS  
 CN Benzoic acid, 4,4'-[(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis(methyleneo  
 xy)]bis- (9CI) (CA INDEX NAME)



L38 ANSWER 11 OF 24 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1995:435596 HCAPLUS  
 DOCUMENT NUMBER: 122:201395  
 TITLE: Liquid crystal compound and its-containing liquid  
 crystal composition used in liquid crystal display  
 INVENTOR(S): Iwaki, Takashi; Takiguchi, Takao; Tokano, Goji;  
 Yamada, Yoko; Nakamura, Shinichi  
 PATENT ASSIGNEE(S): Canon Kk, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 80 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06128276	A2	19940510	JP 1992-306249	19921020

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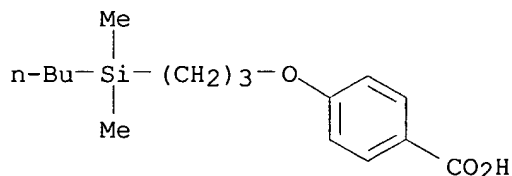
AB The title liq. crystal compd. has formula I (R1, R2 = C1-18 alkyl whose methylene group can be replaced by O, S, CO, CO2, OCO or substituted by F; when 1 of R1 or R2 is Q (R3-5 is defined as R1 and R2; Z3 = O, CO, CO2, OCO), the other R1 or R2 may be H, halo, or CN; X = O, S; A1-3 = specified arom. or heterocyclic group; Z1, Z2 = single bond, CO2, OCO, CH2O, OCH2; p, q = 0, 1; n = 1-12). The liq. crystal compn. contains 1-40% of the above liq. crystal compd. The liq. crystal display using the liq. crystal compn. shows rapid response and can reduce the temp. dependence of the response speed.

IT 161707-73-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepd. for prepg. liq. crystal compd. for liq. crystal display)

RN 161707-73-9 HCAPLUS

CN Benzoic acid, 4-[3-(butyldimethylsilyl)propoxy]- (9CI) (CA INDEX NAME)



L38 ANSWER 12 OF 24 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1994:656449 HCAPLUS

DOCUMENT NUMBER: 121:256449

TITLE: Synthesis and properties of thermotropic liquid crystal polyesters

AUTHOR(S): Liu, Zhenhua; Zhuo, Renxi; Den, Wei; Chen, Qiming

CORPORATE SOURCE: Dep. Chem., Wuhan Univ., Wuhan, 430072, Peop. Rep. China

SOURCE: Wuhan Daxue Xuebao, Ziran Kexueban (1993), (2), 51-6  
CODEN: WTHPDI; ISSN: 0253-9888

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

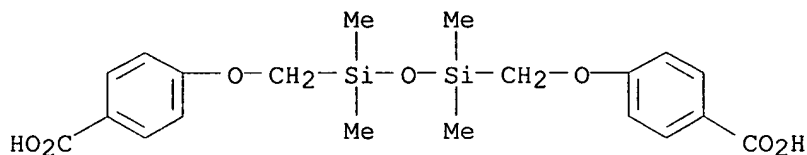
AB Six new thermotropic liq. cryst. polyesters were synthesized by polycondensation of diacid chloride and arom. dihydroxy compd. in 1,1,2,2-tetrachloroethane. Their liq. cryst. properties were studied by DSC and polarized light microscopy with a hot-stage. The polyesters contg. disiloxane or polymethylene flexible spacers formed nematic phase, and the polyesters contg. both disiloxane and polymethylene flexible spacers have no stable liq. cryst. state.

IT 82345-25-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (intermediate; prepn. of monomers for synthesis of disiloxane or  
 polymethylene-contg. thermotropic liq. crystal polyesters)

RN 82345-25-3 HCAPLUS

CN Benzoic acid, 4,4'-[(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis(methyleneoxy)]bis- (9CI) (CA INDEX NAME)



L38 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1992:235862 HCAPLUS

DOCUMENT NUMBER: 116:235862

TITLE: Preparation of [(silylphenyl)carbonyl]benzoic acids  
 and related compounds

INVENTOR(S): Shudo, Koichi

PATENT ASSIGNEE(S): Japan

SOURCE: U.S., 11 pp.  
 CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

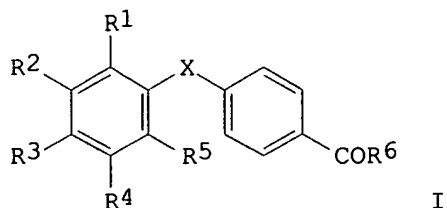
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5081271	A	19920114	US 1989-329648	19890328
JP 01249783	A2	19891005	JP 1988-75237	19880329
JP 2752630	B2	19980518		
US 5155249	A	19921013	US 1991-657497	19910219
US 36477	E	19991228	US 1998-104559	19980625
PRIORITY APPLN. INFO.:			JP 1988-75237	19880329
			US 1989-329648	19890328
			US 1991-657497	19910219

OTHER SOURCE(S): MARPAT 116:235862

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I

AB Title compds. I [R1 = H, C1-4 alkyl; R2, R4 = H, Me3Si, Me3Ge; R3 = H, C1-4 alkyl, Me3Si, Me3Ge; R5 = H, C1-4 alkyl, Ac, OH; at least one of R2 and R3 = Me3Si or Me3Ge; R6 = OH, C1-4 alkoxy, NR7R8; R7, R8 = H, C1-4

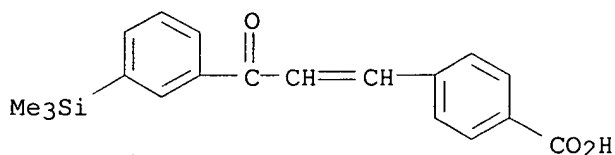
alkyl; X = CONH, NHCO, CO<sub>2</sub>, OCO, COCH:CH, COCH:C(OH), CH:CH] were prepd. as neoplasm inhibitors, antiinflammatories, immunosuppressants, and for the treatment of psoriasis. Thus, 1-nitro-3-trimethylsilylbenzene (prepn. given) was reduced over Pd/C to give m-trimethylsilylaniline. This was condensed with Me p-chloroformylbenzoate and the product formed was hydrolyzed by 2N NaOH to give 4-(3-trimethylsilylphenylcarbonyl)benzoic acid (II). II had an ED<sub>50</sub> of 8.times.10<sup>-8</sup> M for differentiation of HL-60 human promyelocytic leukemia cells.

IT 126030-87-3P 126030-89-5P 126030-90-8P  
126046-30-8P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of, as drug)

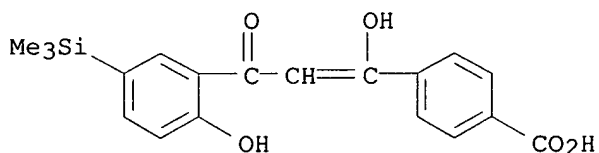
RN 126030-87-3 HCAPLUS

CN Benzoic acid, 4-[3-oxo-3-[3-(trimethylsilyl)phenyl]-1-propenyl]- (9CI)  
(CA INDEX NAME)



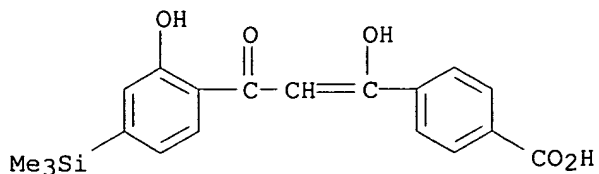
RN 126030-89-5 HCAPLUS

CN Benzoic acid, 4-[1-hydroxy-3-[2-hydroxy-5-(trimethylsilyl)phenyl]-3-oxo-1-propenyl]- (9CI) (CA INDEX NAME)



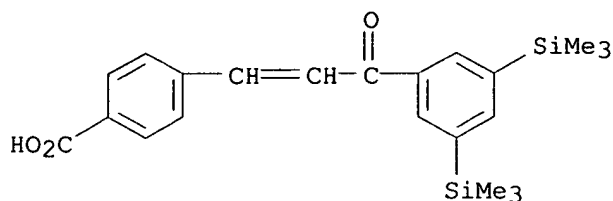
RN 126030-90-8 HCAPLUS

CN Benzoic acid, 4-[1-hydroxy-3-[2-hydroxy-4-(trimethylsilyl)phenyl]-3-oxo-1-propenyl]- (9CI) (CA INDEX NAME)



RN 126046-30-8 HCAPLUS

CN Benzoic acid, 4-[3-[3,5-bis(trimethylsilyl)phenyl]-3-oxo-1-propenyl]- (9CI) (CA INDEX NAME)



L38 ANSWER 14 OF 24 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1991:536381 HCAPLUS

DOCUMENT NUMBER: 115:136381

TITLE: Preparation of (silylalkyl)benzoates, -phenols, -anilines, etc., as intermediates for liquid crystals

INVENTOR(S): Haerberle, Norman; Haas, Wolfgang; Brader, Leonhard; Kreuzer, Franz Heinrich

PATENT ASSIGNEE(S): Consortium fuer Elektrochemische Industrie G.m.b.H., Fed. Rep. Ger.

SOURCE: Eur. Pat. Appl., 16 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

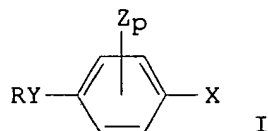
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 424959	A2	19910502	EP 1990-120588	19901026
EP 424959	A3	19910911		
EP 424959	B1	19950201		
R: BE, CH, DE, FR, GB, LI, NL				
DE 3935638	A1	19910502	DE 1989-3935638	19891026
JP 03145494	A2	19910620	JP 1990-279517	19901019
JP 07064857	B4	19950712		
US 5210247	A	19930511	US 1990-600659	19901022
CA 2028286	AA	19910427	CA 1990-2028286	19901023
CA 2028286	C	19950704		

PRIORITY APPLN. INFO.:

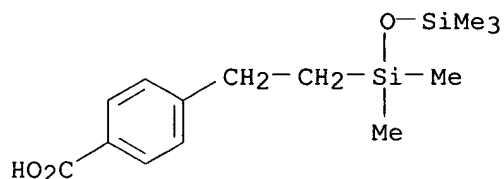
DE 1989-3935638 19891026

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AB Title compds. [I; R = organosilyl; Y = divalent residue contg. a chain with .gtoreq.3 atoms; X = CO2H, cyano, CHO, NH2, (protected) OH; Z = H, halo, other residues; p = 0-4], were prepd. Thus, 4-(5-hexenyl)-1-chlorobenzene in PhMe (prepn. given) was treated with dicyclopentadienylplatinum dichloride in CH2Cl2 and Me3SiH and the mixt. was heated at 70-80.degree. and 8 MPa to give 77.1% 4-(6-trimethylsilylhexyl)-1-chlorobenzene. The latter in THF was converted to the Grignard reagent, which was added to THF satd. with CO2 to give 68.5% 4-(6-trimethylsilylhexyl)benzoic acid. I are useful as intermediates for

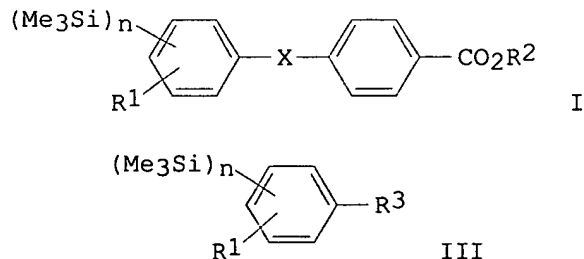
liq. crystals (Ger. Pat P3920509.6).  
 IT **135981-51-0P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of, as liq. crystal intermediate)  
 RN 135981-51-0 HCAPLUS  
 CN Benzoic acid, 4-[2-(pentamethyldisiloxanyl)ethyl]- (9CI) (CA INDEX NAME)



L38 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1991:142884 HCAPLUS  
 DOCUMENT NUMBER: 114:142884  
 TITLE: Preparation of benzoic acid derivatives for treatment  
 of neoplasm, psoriasis, and immune and inflammatory  
 diseases  
 INVENTOR(S): Shudo, Koichi  
 PATENT ASSIGNEE(S): Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02247185	A2	19901002	JP 1989-69883	19890320
JP 2761023	B2	19980604		

OTHER SOURCE(S): MARPAT 114:142884  
 GI



AB The title derivs. I [R1 = H, OH, lower alkanoyl; R2 = H, lower alkyl; X = CONH, CO2, O2C, COCH:C(OH); n = 1, 2] (II) and their pharmacol. acceptable salts, a process for the prepn. of I (X = CONH), I (X = CO2), I (X = OCO), or I [X = COCH:C(OH), 2-R1 = OH] by condensation of reactive derivs. (acid halides, mixed acid anhydrides, etc.) of benzene derivs. III (R3 = CO2H) (IV) with p-H2NC6H4CO2H or its esters, condensation of reactive derivs. (acid halides, mixed acid anhydrides, etc.) of IV with p-HOC6H4CO2H or its



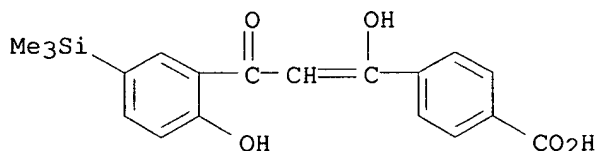
esters, condensation of III ( $R_3 = OH$ ) with reactive derivs. (acid halides, mixed acid anhydrides, etc.) of  $p\text{-C}_6\text{H}_4(\text{CO}_2\text{H})_2$  or its esters, or rearrangement of III ( $R_3 = \text{Ac}$ ,  $2\text{-R}_1 = \text{OCOC}_6\text{H}_4\text{CO}_2\text{R}_2\text{-4}$ ) in the presence of alkali catalysts, resp., optionally followed by hydrolysis, differentiation promoters for cancers, esp. for leukemia, drugs for treatment of psoriasis, and drugs for treatment of immune and inflammatory diseases contg. II or their pharmacol. acceptable salts as active ingredients (no data) are described. A mixt. of 3,5-( $\text{Me}_3\text{Si}$ ) $2\text{C}_6\text{H}_3\text{CO}_2\text{H}$ , prepd. by oxidn. of 3,5-( $\text{Me}_3\text{Si}$ ) $2\text{C}_6\text{H}_3\text{COMe}$ ,  $\text{CaCO}_3$ , and benzene was treated with  $\text{SOCl}_2$  and DMF at room temp. for 3 h and the resulting acid chloride in THF was treated with  $p\text{-H}_2\text{NC}_6\text{H}_4\text{CO}_2\text{Me}$  and  $\text{Et}_3\text{N}$  at room temp. overnight to give 84% 3,5-( $\text{Me}_3\text{Si}$ ) $2\text{C}_6\text{H}_3\text{CONHC}_6\text{H}_4\text{CO}_2\text{Me-4}$ .

IT 126030-89-5P 126030-90-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, for treatment of neoplasm, psoriasis, immune, and inflammatory diseases)

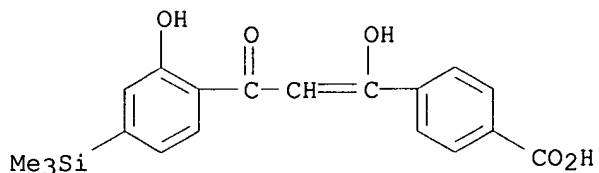
RN 126030-89-5 HCAPLUS

CN Benzoic acid, 4-[1-hydroxy-3-[2-hydroxy-5-(trimethylsilyl)phenyl]-3-oxo-1-propenyl]- (9CI) (CA INDEX NAME)



RN 126030-90-8 HCAPLUS

CN Benzoic acid, 4-[1-hydroxy-3-[2-hydroxy-4-(trimethylsilyl)phenyl]-3-oxo-1-propenyl]- (9CI) (CA INDEX NAME)



L38 ANSWER 16 OF 24 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1991:15020 HCAPLUS

DOCUMENT NUMBER: 114:15020

TITLE: 1,3-Bis[4-[4-halo(di)phenyloxycarbonyl]phenoxyalkyl]-  
1,1,3,3-tetramethylsiloxanes as nematic liquid  
crystals and liquid-crystal compositions containing  
them

INVENTOR(S): Sugimori, Shigeru

PATENT ASSIGNEE(S): Chisso Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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GI

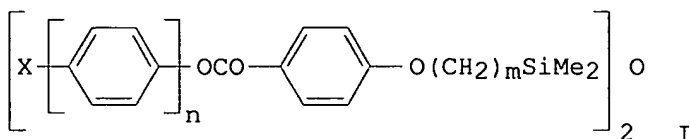
JP 02180890

A2

19900713

JP 1989-414

19890106



AB The title disiloxanes I (X = F, Cl; m = 3-10; n = 1, 2) as liq. crystals and liq.-crystal comps. contg. .gtoreq.1 I are claimed. I show nematic liq.-crystal phase with high nematic-isotropic transition (N-I) temp. and addn. of small amt. of I to liq.-crystal comps. raises N-I temp. without increasing viscosity, thus I are useful for super-twisted nematic display devices. 4-CH<sub>2</sub>:CHCH<sub>2</sub>OC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>Me was treated with (HSiMe<sub>2</sub>)<sub>2</sub>O in the presence of Speier's catalyst to give [(4-HOCOC<sub>6</sub>H<sub>4</sub>O(CH<sub>2</sub>)<sub>3</sub>SiMe<sub>2</sub>)<sub>2</sub>O], which was treated with SOCl<sub>2</sub>, then 4-FC<sub>6</sub>H<sub>4</sub>OH to give I (X = F, m = 3, n = 1) (II) showing a nematic liq.-crystal phase. Addn. of II to a nematic liq.-crystal compn. composed of trans-4-propyl-(4-cyanophenyl)cyclohexane, trans-4-pentyl-(4-cyanophenyl)cyclohexane, and trans-4-heptyl-(4-cyanophenyl)cyclohexane raised N-I temp.

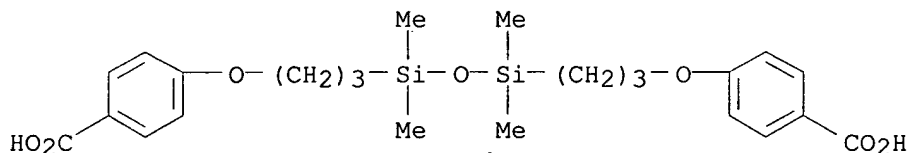
IT 130976-19-1P

RL: RCT (Reactant); PREP (Preparation)

(prepn. and esterification of, with fluorophenol, nematic liq. crystal from)

RN 130976-19-1 HCAPLUS

CN Benzoic acid, 4,4'-[(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis(3,1-propanediylloxy)]bis- (9CI) (CA INDEX NAME)



L38 ANSWER 17 OF 24 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1990:217274 HCAPLUS

DOCUMENT NUMBER: 112:217274

TITLE: Trimethylsilyl- and trimethylgermyl-containing benzoic acid derivatives, their preparation and use in treatment of neoplasms, psoriasis, and immune and inflammatory diseases

INVENTOR(S): Shudo, Koichi

PATENT ASSIGNEE(S): Japan

SOURCE: Eur. Pat. Appl., 21 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

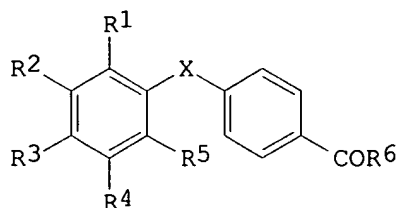
PATENT INFORMATION:

PATENT NO.

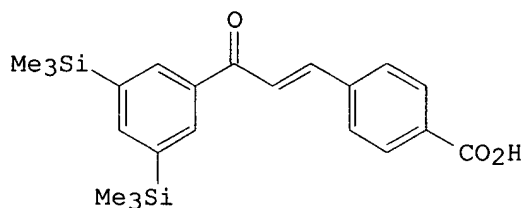
KIND DATE

APPLICATION NO. DATE

EP 337176	A2	19891018	EP 1989-105313	19890324
EP 337176	A3	19901128		
EP 337176	B1	19941221		
R: CH, DE, FR, GB, LI				
JP 01249783	A2	19891005	JP 1988-75237	19880329
JP 2752630	B2	19980518		
PRIORITY APPLN. INFO.:			JP 1988-75237	19880329
OTHER SOURCE(S):			MARPAT 112:217274	
GI				



I



II

AB Eleven title compds. I [R1 = H, alkyl; R2, R4 = H, SiMe3, GeMe3; R3 = H, alkyl, SiMe3, GeMe3; R5 = H, alkyl, Ac, OH; R2 and/or R3 must = SiMe3 or GeMe3; X = CONH, NHCO, COO, OCO, COCH:CH, COCH:C(OH), CH:CH; R6 = OH, alkoxy, amino], cell differentiation-inducing agents with the title uses, were prepd. Thus, condensation of 3,5-(Me3Si)2C6H3COMe with 4-(OCH)C6H4CO2Me in aq. THF contg. NaOH, followed by hydrolysis in situ, gave 66% [[bis(trimethylsilyl)phenyl]oxopropenyl]benzoic acid II. The ED50 of II for differentiation of human leukemia HL-60 cells in vitro was 2 .times. 10-10 M, vs. 2 .times. 10-9 M for retinoic acid.

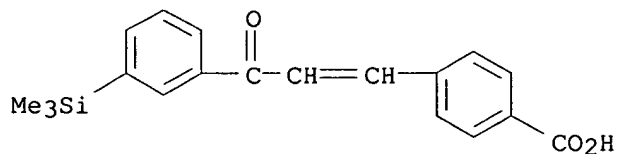
IT 126030-87-3P 126030-89-5P 126030-90-8P

126046-30-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as cell differentiation-inducing agent)

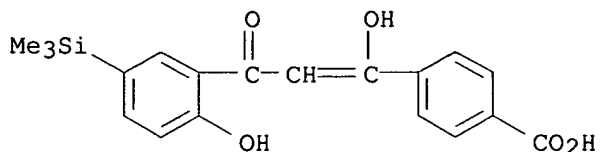
RN 126030-87-3 HCAPLUS

CN Benzoic acid, 4-[3-oxo-3-[3-(trimethylsilyl)phenyl]-1-propenyl]- (9CI)  
(CA INDEX NAME)



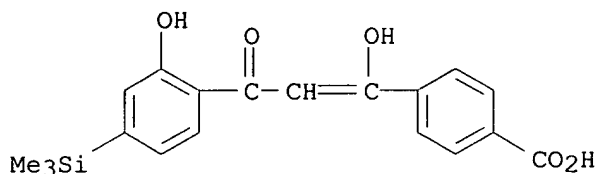
RN 126030-89-5 HCAPLUS

CN Benzoic acid, 4-[1-hydroxy-3-[2-hydroxy-5-(trimethylsilyl)phenyl]-3-oxo-1-propenyl]- (9CI) (CA INDEX NAME)



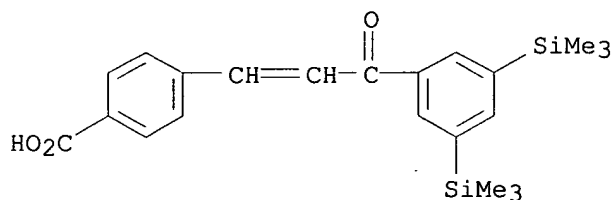
RN 126030-90-8 HCAPLUS

CN Benzoic acid, 4-[1-hydroxy-3-[2-hydroxy-4-(trimethylsilyl)phenyl]-3-oxo-1-propenyl]- (9CI) (CA INDEX NAME)



RN 126046-30-8 HCAPLUS

CN Benzoic acid, 4-[3-[3,5-bis(trimethylsilyl)phenyl]-3-oxo-1-propenyl]- (9CI) (CA INDEX NAME)



L38 ANSWER 18 OF 24 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1990:198609 HCAPLUS

DOCUMENT NUMBER: 112:198609

TITLE: Retinobenzoic acids. 5. Retinoidal activities of compounds having a trimethylsilyl or trimethylgermyl group(s) in human promyelocytic leukemia cells HL-60

AUTHOR(S): Yamakawa, Takeru; Kagechika, Hiroyuki; Kawachi, Emiko; Hashimoto, Yuichi; Shudo, Koichi

CORPORATE SOURCE: Fac. Pharm. Sci., Univ. Tokyo, Tokyo, 113, Japan

SOURCE: J. Med. Chem. (1990), 33(5), 1430-7

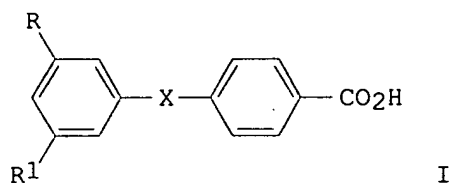
CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 112:198609

GI



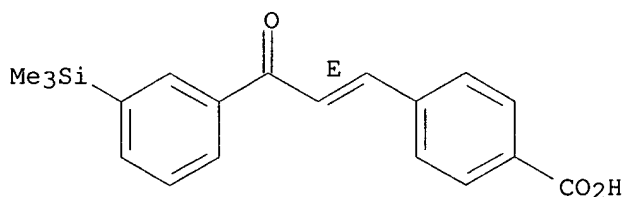
AB The retinoidal activities of Me<sub>3</sub>Si or Me<sub>3</sub>Ge-contg. retinobenzoic acids were prepd. and discussed on the basis of differentiation-inducing activity on human promyelocytic leukemia cells HL-60. Compds. with a Me<sub>3</sub>Si or Me<sub>3</sub>Ge group at the meta position of the generic structure I (R, R<sub>1</sub> = H, Me<sub>3</sub>Si, Me<sub>3</sub>Ge, X = NHCO, CONH, COCH:CH, CH:CH etc.) have more potent activities than the corresponding retinobenzoic acids with a meta-tert-Bu group. Compds. having two m-Me<sub>3</sub>Si or -Me<sub>3</sub>Ge groups also have strong activities, and (E)-4-[3-[3,5-bis(trimethylsilyl)phenyl]-3-oxo-1-propenyl]benzoic acid and (E)-4-[3-[3,5-bis(trimethylgermyl)phenyl]-3-oxo-1-propenyl]benzoic acid are more active than retinoic acid by 1 order of magnitude. However, in the p-substituted chalcone derivs., the replacement of a tert-Bu group with a Me<sub>3</sub>Si or a Me<sub>3</sub>Ge group caused the disappearance of the activity.

IT 125973-57-1P 125973-58-2P 125973-59-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and retinoidal activity of)

RN 125973-57-1 HCAPLUS

CN Benzoic acid, 4-[3-oxo-3-[3-(trimethylsilyl)phenyl]-1-propenyl]-, (E)-  
 (9CI) (CA INDEX NAME)

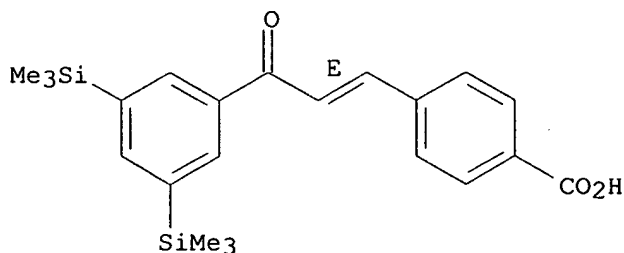
Double bond geometry as shown.



RN 125973-58-2 HCAPLUS

CN Benzoic acid, 4-[3-[3,5-bis(trimethylsilyl)phenyl]-3-oxo-1-propenyl]-,  
 (E)- (9CI) (CA INDEX NAME)

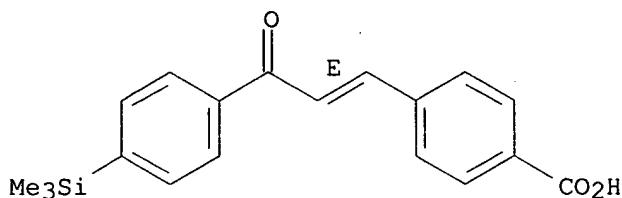
Double bond geometry as shown.



RN 125973-59-3 HCAPLUS

CN Benzoic acid, 4-[3-oxo-3-[4-(trimethylsilyl)phenyl]-1-propenyl]-, (E)-  
(9CI) (CA INDEX NAME)

Double bond geometry as shown.



L38 ANSWER 19 OF 24 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1983:5047 HCAPLUS  
 DOCUMENT NUMBER: 98:5047  
 TITLE: Siloxanes  
 INVENTOR(S): Berger, Abe  
 PATENT ASSIGNEE(S): M and T Chemicals Inc. , USA  
 SOURCE: Eur. Pat. Appl., 290 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 5  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 54426	A2	19820623	EP 1981-305864	19811214
EP 54426	A3	19820811		
R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
US 4395527	A	19830726	US 1980-216599	19801215
PRIORITY APPLN. INFO.:			US 1980-216599	19801215
			US 1978-906877	19780517
			US 1978-907155	19780517
			US 1978-958358	19781106
			US 1979-11901	19790213
			US 1979-16412	19790301
			US 1979-51699	19790625
			US 1979-51840	19790625
			US 1980-126666	19800303
			US 1980-158056	19800609
			US 1980-174400	19800801
			US 1980-205120	19801110

AB Monomers or polymers contg. the linkage  $ZZ_1Z_2SiR_2(OSiR_1)_x(OSiR_2R_3)_y(OSiR_4R_5)_zOSiR_2Z_2Z_1Z$  ( $Z$  = substituted or unsubstituted arom. compd.;  $Z_1$  = O, S, SO, SO<sub>2</sub>, SO<sub>2</sub>NH, NHSO<sub>2</sub>, CONH, NHCO, CO<sub>2</sub>, O<sub>2</sub>C;  $Z_2$  = substituted or unsubstituted hydrocarbylene; R, R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub> = substituted or unsubstituted hydrocarbyl; x, y, z = 0-100) were prepd. and used in modification of polyimides and other polymers. Thus, a mixt. consisting of 50% aq. NaOH 43.28, DMSO 112, PhMe 120, and p-aminophenyl [123-30-8] 59.95 parts was heated under N, azeotropically distd. to removed water, stirred 7-8 h while the temp. increased to 122.degree., cooled to .apprx.80.degree., treated with 86.6 parts bis(chlorobutyl)tetramethyldisiloxane [72066-91-2] dropwise to maintain the reaction temp. at .apprx.80.degree., heated .apprx.16 h at 80.degree., and distd. at 295-300.degree. at 0.5-2 mm Hg to give bis(p-aminophenoxybutyl)tetramethyl disiloxane (I) [72066-92-3] which was a colorless liq. which eventually

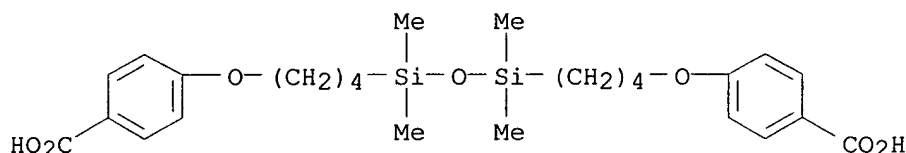
solidified to a white solid with melting 48-49.degree.. A mixt. consisting of I 54.64, m-phenylenediamine 29.94, and n-methylpyrrolidone 636 g was cooled to 0.degree., treated portionwise over a 4-h period with 127.05 g benzophenone tetracarboxylic dianhydride, stirred 10 h at room temp. to give a dark amber clear viscous soln. of the corresponding poly(half-amide) which was coated on a glass slide to .apprx.0.2 mil thickness, heated 2 h at 120.degree., heated 2 h at 135.degree., heated 2 h at 185.degree., heated 2 h at 250.degree., and heated 0.5 h at 300.degree. to give a polyimide [83874-52-6] coating which bonded tenaciously to the glass slide even after immersion in boiling water for 6 h. The polyimide was excellent as a passivation and/or protective coating for semiconductor devices including application of the material to exposed portions of P-N junctions. Low leakage current <0.3 .mu.amps was obsd. at 0.31 .mu.amps and 2000 V. The polyimide could resist 450.degree. for <1 h.

IT 83874-58-2P

RL: PREP (Preparation)  
(prepn. of)

RN 83874-58-2 HCAPLUS

CN Benzoic acid, 4,4'-[(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis(4,1-butanediyoxy)]bis- (9CI) (CA INDEX NAME)



L38 ANSWER 20 OF 24 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1982:439581 HCAPLUS

DOCUMENT NUMBER: 97:39581

TITLE: Liquid crystal polymers. VI. Synthesis and properties of main chain thermotropic polyesters with disiloxane spacers

AUTHOR(S): Jo, B.-W.; Jin, J.-I.; Lenz, R. W.

CORPORATE SOURCE: Chem. Eng. Dep., Univ. Massachusetts, Amherst, MA, 01003, USA

SOURCE: Eur. Polym. J. (1982), 18(3), 233-9

CODEN: EUPJAG; ISSN: 0014-3057

DOCUMENT TYPE: Journal

LANGUAGE: English

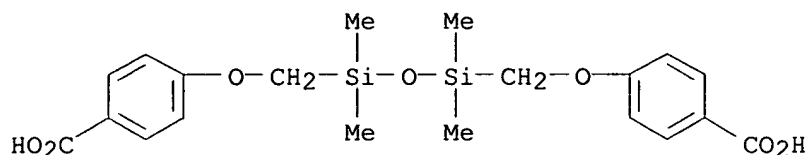
AB Thermotropic, liq. cryst. polyester-siloxanes were prepd. and their thermal properties and the characteristics of their mesophases were detd. by differential scanning calorimetry, hot-stage polarizing microscopy, and small-angle light scattering. Equimolar copolymers contg. both siloxane and decamethylene spacers were also prepd. and characterized. All the polymers formed nematic phases, and the thermodyn. of their nematic-isotropic phase transitions were explained on the basis of structure.

IT 82345-25-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

RN 82345-25-3 HCAPLUS

CN Benzoic acid, 4,4'-[(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis(methyleneoxy)]bis- (9CI) (CA INDEX NAME)

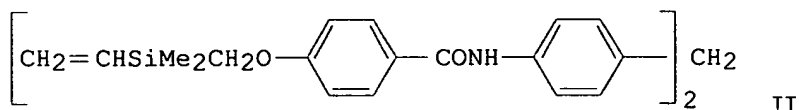


L38 ANSWER 21 OF 24 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1976:434387 HCAPLUS  
 DOCUMENT NUMBER: 85:34387  
 TITLE: Thermoplastic polysiloxane elastomers  
 INVENTOR(S): Bargain, Michel; Lefort, Marcel  
 PATENT ASSIGNEE(S): Rhone-Poulenc S. A., Fr.  
 SOURCE: Ger. Offen., 79 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2543919	A1	19760408	DE 1975-2543919	19751001
DE 2543919	C2	19870527		
FR 2286832	A1	19760430	FR 1974-33041	19741001
FR 2286832	B1	19781229		
FR 2300778	A1	19760910	FR 1975-4192	19750211
NL 7511212	A	19760405	NL 1975-11212	19750923
NL 182085	B	19870803		
NL 182085	C	19880104		
BR 7506234	A	19760803	BR 1975-6234	19750926
JP 51061600	A2	19760528	JP 1975-117586	19750929
AU 7585269	A1	19770407	AU 1975-85269	19750929
US 4088670	A	19780509	US 1975-617513	19750929
DK 7504397	A	19760402	DK 1975-4397	19750930
SE 7510968	A	19760402	SE 1975-10968	19750930
SE 424554	B	19820726		
SE 424554	C	19821104		
GB 1517557	A	19780712	GB 1975-40055	19750930
CH 611914	A	19790629	CH 1975-12663	19750930
CA 1072241	A1	19800219	CA 1975-236683	19750930
DD 122989	C	19761112	DD 1975-188668	19751001
AT 354090	B	19791227	AT 1975-7505	19751001
AT 7507505	A	19790515		
SU 721007	D	19800305	SU 1975-2176949	19751001
ES 441420	A1	19770616	ES 1975-441420	19751002
US 4147711	A	19790403	US 1977-851898	19771116
US 4213914	A	19800722	US 1978-965529	19781201
US 4275184	A	19810623	US 1979-88584	19791026
PRIORITY APPLN. INFO.:			FR 1974-33041	19741001
			FR 1975-4192	19750211
			FR 1975-4191	19750211
			US 1975-617513	19750929
			US 1977-851898	19771116
			US 1978-965529	19781201

GI





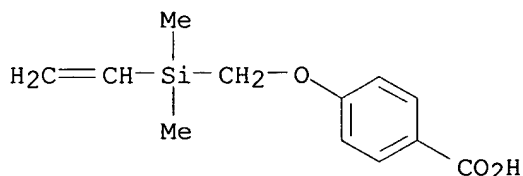
AB Hydrolysis-resistant, thermoplastic silicone rubbers, contg. siloxane blocks linked by arom. ester, amide, or imide units, are prepd. by coupling SiH-terminated blocks with SiCH:CH<sub>2</sub>-terminated blocks. Thus, adding 672 g Me<sub>2</sub>Si(CH<sub>2</sub>Cl)CH:CH<sub>2</sub> [16709-86-7] over 65 min to the Na salt of 760 g p-HOC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>Me [99-76-3] in 850 ml N-methylpyrrolidone stirred at 108-28.degree. gives 1136 g p-CH<sub>2</sub>:CHSi(Me)<sub>2</sub>CH<sub>2</sub>OC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>Me [59571-34-5], sapond. to the acid [59571-35-6], reaction of 354 g of which with 357 g SOCl<sub>2</sub> gives 344 g acid chloride (I) [59571-36-7]. Adding 168 g I over 90 min to 65.5 g CH<sub>2</sub>(C<sub>6</sub>H<sub>4</sub>NH<sub>2</sub>-p)<sub>2</sub> [101-77-9], 74 g Et<sub>3</sub>N, and 350 ml CHCl<sub>3</sub> stirred at 0.degree. gives 171 g amide (II) [59571-37-8]. Stirring II 31.7, SiH-terminated dimethylsiloxane (mol. wt. 2150, 25.degree. viscosity 26.5 cSt) 108.14, and PhMe 419 g with 3.3 ml 0.003 M isopropanolic H<sub>2</sub>PtCl<sub>6</sub> 4 hr at reflux gives a rubber with intrinsic viscosity (CHCl<sub>3</sub>, 25.degree.) 65 ml/g, viscosity of 20% PhMe soln. 30 P at 25.degree., softening point 160.degree., mol. wt. 170,000, tensile strength 88 kg/cm<sup>2</sup>, and elongation 660%.

IT 59571-35-6P

RL: IMF (Industrial manufacture); PREP (Preparation)  
(prepn. of)

RN 59571-35-6 HCAPLUS

CN Benzoic acid, 4-[(ethenyldimethylsilyl)methoxy]- (9CI) (CA INDEX NAME)



L38 ANSWER 22 OF 24 HCAPLUS COPYRIGHT 2001 ACS  
 ACCESSION NUMBER: 1976:433664 HCAPLUS  
 DOCUMENT NUMBER: 85:33664  
 TITLE: Polyethylenic silicon compounds  
 INVENTOR(S): Bargain, Michel; Lefort, Marcel  
 PATENT ASSIGNEE(S): Rhone-Poulenc S. A., Fr.  
 SOURCE: Ger. Offen., 87 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2543883	A1	19760408	DE 1975-2543883	19751001
FR 2286832	A1	19760430	FR 1974-33041	19741001
FR 2286832	B1	19781229		
FR 2300767	A1	19760910	FR 1975-4191	19750211

NL 7511210	A	19760405	NL 1975-11210	19750923
BR 7506233	A	19760803	BR 1975-6233	19750926
JP 51063128	A2	19760601	JP 1975-117585	19750929
JP 57061277	B4	19821223		
AU 7585272	A1	19770407	AU 1975-85272	19750929
US 4088670	A	19780509	US 1975-617513	19750929
DK 7504396	A	19760402	DK 1975-4396	19750930
SE 7510967	A	19760402	SE 1975-10967	19750930
SE 426832	B	19830214		
SE 426832	C	19830526		
DD 122990	C	19761112	DD 1975-188628	19750930
GB 1517558	A	19780712	GB 1975-40056	19750930
CA 1071622	A1	19800212	CA 1975-236768	19750930
AT 7507503	A	19770215	AT 1975-7503	19751001
AT 339333	B	19771010		
SU 654177	D	19790325	SU 1975-2176945	19751001
ES 441419	A1	19770616	ES 1975-441419	19751002
US 4147711	A	19790403	US 1977-851898	19771116
US 4213914	A	19800722	US 1978-965529	19781201
US 4275184	A	19810623	US 1979-88584	19791026

## PRIORITY APPLN. INFO.:

FR 1974-33041	19741001
FR 1975-4191	19750211
FR 1975-4192	19750211
US 1975-617513	19750929
US 1977-851898	19771116
US 1978-965529	19781201

AB The prepn. of vinylsilanes linked by ester, amide, or imide groups, useful for polymn. with hydrosilanes, is described. Thus, adding 53.8 g CH<sub>2</sub>:CHSi(Me)2CH<sub>2</sub>Cl [16709-86-7] over 13 min to 64.4 g p-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>ONa [824-78-2] in 203 g N-methylpyrrolidone at 90.degree. and heating 20 hr at 100.degree. gives 91 g p-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>OCH<sub>2</sub>Si(Me)2CH:CH<sub>2</sub> [59571-29-8], redn. of 118.5 g of which with SnCl<sub>2</sub>-HCl gives 79.8 g p-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>OCH<sub>2</sub>Si(Me)2CH:CH<sub>2</sub> (I) [59571-28-7]. Adding 5.22 g p-C<sub>6</sub>H<sub>4</sub>(COCl)<sub>2</sub> [100-20-9] in 17 ml Me<sub>2</sub>CO over 27 min to 10.35 g I, 5.05 g Et<sub>3</sub>N, and 50 ml CCl<sub>4</sub> stirred at -4.degree. to +2.degree. and stirring vigorously 30 min gives 12.90 g p-C<sub>6</sub>H<sub>4</sub>[CONHC<sub>6</sub>H<sub>4</sub>OCH<sub>2</sub>Si(Me)2CH:CH<sub>2</sub>-p]<sub>2</sub> [59571-27-6].

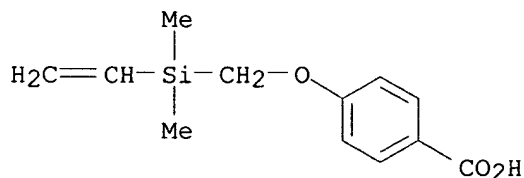
IT 59571-35-6P 59709-33-0P

RL: PREP (Preparation)

(prepn. of)

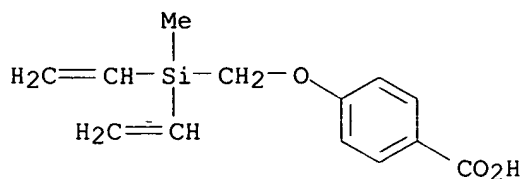
RN 59571-35-6 HCAPLUS

CN Benzoic acid, 4-[(ethenyldimethylsilyl)methoxy]- (9CI) (CA INDEX NAME)



RN 59709-33-0 HCAPLUS

CN Benzoic acid, 4-[(diethenylmethylsilyl)methoxy]- (9CI) (CA INDEX NAME)



L38 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1976:433663 HCAPLUS

DOCUMENT NUMBER: 85:33663

TITLE: Ethylenic silicon compounds with functional groups

INVENTOR(S): Bargain, Michel; Lefort, Marcel

PATENT ASSIGNEE(S): Rhone-Poulenc S. A., Fr.

SOURCE: Ger. Offen., 28 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2543882	A1	19760408	DE 1975-2543882	19751001
DE 2543882	C3	19790802		
DE 2543882	B2	19781116		
FR 2286832	A1	19760430	FR 1974-33041	19741001
FR 2286832	B1	19781229		
NL 7511209	A	19760405	NL 1975-11209	19750923
BR 7506232	A	19760803	BR 1975-6232	19750926
SU 612633	D	19780625	SU 1975-2175639	19750926
JP 51063127	A2	19760601	JP 1975-117584	19750929
JP 58009085	B4	19830218		
ZA 7506152	A	19760929	ZA 1975-6152	19750929
ZA 7506153	A	19760929	ZA 1975-6153	19750929
ZA 7506154	A	19760929	ZA 1975-6154	19750929
AU 7585271	A1	19770407	AU 1975-85271	19750929
US 4088670	A	19780509	US 1975-617513	19750929
BE 834045	A1	19760330	BE 1975-160572	19750930
BE 834044	A1	19760330	BE 1975-160571	19750930
BE 834046	A1	19760330	BE 1975-160573	19750930
DK 7504398	A	19760402	DK 1975-4398	19750930
SE 7510966	A	19760402	SE 1975-10966	19750930
SE 426831	B	19830214		
SE 426831	C	19830526		
GB 1517559	A	19780712	GB 1975-40057	19750930
CH 611907	A	19790629	CH 1975-12661	19750930
CA 1083167	A1	19800805	CA 1975-236684	19750930
AT 7507504	A	19770215	AT 1975-7504	19751001
AT 339334	B	19771010		
DD 126967	C	19770824	DD 1975-188669	19751001
ES 441418	A1	19770301	ES 1975-441418	19751002
US 4147711	A	19790403	US 1977-851898	19771116
US 4213914	A	19800722	US 1978-965529	19781201
US 4275184	A	19810623	US 1979-88584	19791026
PRIORITY APPLN. INFO.:			FR 1974-33041	19741001
			FR 1975-4191	19750211

FR 1975-4192 19750211  
 US 1975-617513 19750929  
 US 1977-851898 19771116  
 US 1978-965529 19781201

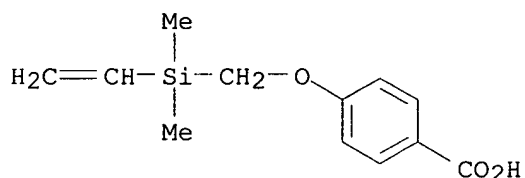
AB The prepn. of vinylsilyl derivs. of amines, esters, ketones, isocyanates, etc., useful in the prepn. of siloxanes and other polymers, is described. Thus, adding 672 g CH<sub>2</sub>:CHSi(Me)<sub>2</sub>CH<sub>2</sub>Cl [16709-86-7] over 65 min to the Na salt of 760 g p-HOC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>Me [99-76-3] in 850 ml N-methylpyrrolidone at 108-28.degree. gives 1136 g p-CH<sub>2</sub>:CHSi(Me)<sub>2</sub>CH<sub>2</sub>OC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>Me [59571-34-5], sapond. to the acid [59571-35-6], to 354 g of which is added 357 g SOCl<sub>2</sub> over 40 min at 28-9.degree. and heated 1 hr at 102.degree. to give 344 g acid chloride [59571-36-7].

IT 59571-35-6P 59709-33-0P 59709-35-2P

RL: PREP (Preparation)  
 (prepn. of)

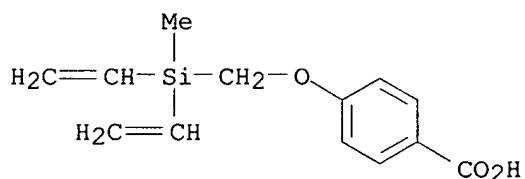
RN 59571-35-6 HCAPLUS

CN Benzoic acid, 4-[(ethenyldimethylsilyl)methoxy]- (9CI) (CA INDEX NAME)



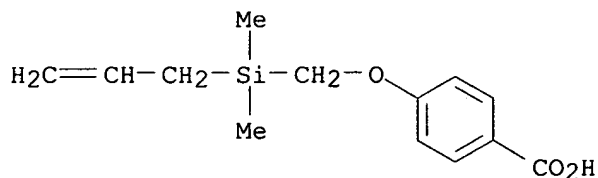
RN 59709-33-0 HCAPLUS

CN Benzoic acid, 4-[(diethenylmethylsilyl)methoxy]- (9CI) (CA INDEX NAME)



RN 59709-35-2 HCAPLUS

CN Benzoic acid, 4-[(dimethyl-2-propenylsilyl)methoxy]- (9CI) (CA INDEX NAME)



L38 ANSWER 24 OF 24 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1974:491623 HCAPLUS

DOCUMENT NUMBER: 81:91623

TITLE: Silalactones from hydrosilyl derivatives of toluic

acids  
 AUTHOR(S): Wolcott, Joanne M.; Cartledge, Frank K.  
 CORPORATE SOURCE: Dep. Chem., Louisiana State Univ., Baton Rouge, La.,  
 USA  
 SOURCE: J. Org. Chem. (1974), 39(16), 2420-4  
 CODEN: JOCEAH  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB 3- and 4-Carboxybenzyldimethylsilane were prepd.: under pyrolytic and  
 hydrolytic conditions these gave dimeric or polymeric silalactones, as  
 well as silanols and disiloxanes. Complex equilibria involving the  
 products were displaced to give virtually exclusive formation of one  
 product. A macrocyclic lactone dimer in the meta series was obtained in  
 good yield. A method for the prepn. of silalactones is proposed, and the  
 monomeric lactone from 2-carboxybenzyldimethylsilane is reported.  
 IT 51801-50-4P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)  
 RN 51801-50-4 HCAPLUS  
 CN Benzoic acid, 4,4'-[(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis(methylene)]  
 bis- (9CI) (CA INDEX NAME)

